CATALOG

COLORADO STATE UNIVERSITY
PUEBLO

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TABLE OF CONTENTS

Notes About This Issue 8
The University 9
Terms of this Catalog Issue 9
Vision, Mission, Values 10
Governance & Accreditation 10
Equal Opportunity/Affirmative Action 10
Campus Safety 11
University Leadership 12
Admission Requirements 14
First Year Students 15
Transfer Students 15
Second Bachelors (Degree Plus) Students 16
Returning Students 16
Graduate Students 17
Graduate Returning Students 17
International Students 17
Non-Degree Students 19
National Student Exchange 19
Residency 21
Exception to Domicile Requirements 22
Other Tuition Classification Categories 23
Student Financial Services 26
Student Financial Services Policies 26
Financial Aid Programs 28
Office of Financial Management 32
Billing 32
Payment Due Dates 33
1098-T 33
Student Affairs 34
Associated Student Government 34
CAMP 34
Career Center 35
Center for International Programs & Inclusive Excellence 35
Commencement Ceremonies 36
Disability Resources 36
First-Generation Programs 36
Greek Life 38
Health Education & Promotion (HEP) Program 38
Major Events 38
Orientation & University Events 39
Pack CARES 39
Pack Pantry 39
Parent & Family Programs/Orientation 39
Residence Life & Housing 39
Spiritual Life 41
Student Affairs Assessment 41
Student Conduct & Community Standards 41
Student Counseling Center 42
Student Health Services 42
Student Involvement & Organizations 42
Student Recreation Services 43
Academic Policies 45
Academic Conduct 45
Academic Fresh Start 46
Academic Standing 46
Academic Year 47
Assessment of Student Learning 47
Attendance 47
Awarding of Degrees 48
Class Schedule Change 49
Classification of Students 49
Course Repeats 50
Course Substitutions 50
Course Withdrawals 50
Equivalency Charts 51
Experiential Education 58
FERPA 59
Freedom of Expression 62
General Education 62
Grades & Grading System 65
Immunization Requirement 66
Prior Learning 67
Program Requirements 68
Registration 71
Student Bill of Rights 72
Time Limit of Credit 72
Transcript of Credit 73
Transfer 73
Graduate School 75
Graduate School Acceptance of Transfer Credits 77
Graduate School Admission Policies 77
Graduate School Admission Procedures 78

Graduate School Appeals 78
Graduate School Credit for Prior Learning 78
Graduate School Grading System 79
Graduate School Program Requirements 79
Graduate School Registration 80
Graduate School Time Limit of Credit 81
Special Academic Programs & Services 82
Associate of Arts 82
Associate of General Studies 82
Athletics 83
Center for Honors & Leadership 84
Center for Teaching & Learning 84
Communities to Build Active Stem Engagement 84
CSU Pueblo Bookstore 84
CSU Pueblo Food Services 85
Math Learning Center 85
Microcredentials 85
Occhiato Student Center 86
Pack Center 86
President's Leadership Program, Minor 86
Rocky Mountain Public Media (RMPM) 88
Student & Exchange Visitor Program 88
University Honors Minor Program 89
University Library 90
University Studies 90
Extended Studies 91
Career & Professional Enhancement 91
CSU Pueblo Online 91
External Degree Program 91
High School Programs 91
Independent Study Program 92
Interdisciplinary Studies, Bachelor of Science 92
Organizational Leadership, Bachelor of Applied Science 93
Teacher Education Program 94
Academic & Degree Programs 95
College of Health & Education 110
School of Education 112
Character Education & Social Emotional Learning, Post-Baccalaureate Certificate 128
Early Childhood Education, Bachelor of Science 128
Early Childhood Education, Post-Baccalaureate Certificate ... 129
Early Childhood Education: K-3 Teacher Preparation Concentration, Bachelor of Science 129
Education: Art Education Concentration, Master of Education 131
Education: Curriculum & Instruction Concentration, Master of Education 134
Education: Early Childhood Education Concentration, Master of Education 137
Education: Early Learning Concentration, Master of Education 140
Education: Educational Leadership Concentration, Master of Education 143
Education: English Concentration, Master of Education 146
Education: Gifted Education Concentration, Master of Education 149
Education: Health & Physical Education Concentration, Master of Education 151
Education: Instructional Technology Concentration, Master of Education 154
Education: Linguistically Diverse Concentration, Master of Education 157
Education: Music Education Concentration, Master of Education 160
Education: Principal Licensure, Post-Baccalaureate Certificate 163
Education: Reading, Language, & Literacy Concentration, Master of Education 164
Education: Space Studies for Educators Concentration, Master of Education 166
Education: Special Education Concentration, Master of Education 169
Education: World Language Concentration, Master of Education 172
Educational Leadership, Doctor of Education 175
Elementary Education: K-6 Teacher Preparation Concentration, Bachelor of Science 176
K-12 Art, Post-Baccalaureate Certificate 180
K-12 Culturally & Linguistically Diverse Education, Post-Baccalaureate Certificate 181
K-12 Instructional Technology, Post-Baccalaureate Certificate 181
K-12 Music, Post-Baccalaureate Certificate 181
K-12 Physical Education, Post-Baccalaureate Certificate 182
K-12 Special Education Generalist, Post-Baccalaureate Certificate 182
K-12 World Languages - Spanish, Post-Baccalaureate Certificate 182
K-6 Elementary Education, Post-Baccalaureate Certificate 183

Middle School (6-8) Mathematics, Post-Baccalaureate Certificate 183
Middle School Mathematics: 6-8 Teacher Preparation Concentration, Bachelor of Science 184
Reading, Minor 185
Secondary & K-12 Education, Minor 185
Secondary English, Post-Baccalaureate Certificate 187
Secondary Mathematics, Post-Baccalaureate Certificate 187
Secondary Science - Biology, Post-Baccalaureate Certificate 188
Secondary Science - Chemistry, Post-Baccalaureate Certificate 188
Secondary Science - Physical Science, Post-Baccalaureate Certificate 189
Secondary Science - Physics, Post-Baccalaureate Certificate 190
Secondary Social Studies - History, Post-Baccalaureate Certificate 190
Secondary Social Studies - Political Science, Post-Baccalaureate Certificate 191
School of Health Sciences & Human Movement 191
Athletic Training 3+2 Program, Bachelor of Science/Master of Science 207
Athletic Training, Master of Science 209
Coaching, Minor 210
Exercise Science, Minor 210
Exercise Science, Physical Education, & Recreation: General Exercise Science Concentration, Bachelor of Science 210
Exercise Science, Physical Education, & Recreation: K-12 Physical Education Teacher Preparation Concentration, Bachelor of Science 212
Exercise Science, Physical Education, & Recreation: K-12 Teacher Preparation Concentration 3+2 Plan, Integrated Bachelor of Science/Master of Education: Health & Physical Education Concentration 214
Exercise Science, Physical Education, & Recreation: Recreation Concentration, Bachelor of Science 217
Exercise Science, Physical Education, & Recreation: Strength & Conditioning Concentration, Bachelor of Science 218
Fitness & Recreational Sports Management, Minor 219
Health & Fitness Certification for the Department of Corrections 219
Health Coaching, Minor 220
Health Science & Administration, Bachelor of Applied Science 220
Health Sciences: General Health Science Concentration, Bachelor of Science 221
Health Sciences: Health Coaching Concentration, Bachelor of Science 223
Health Sciences: Pre-Accelerated Nursing Concentration, Bachelor of Science 224
Health Sciences: Pre-Athletic Training Concentration, Bachelor of Science 225
Health Sciences: Pre-Nursing Concentration 226
Health Sciences: Public Health Concentration, Bachelor of Science 228
Outdoor Recreation, Minor 229
Public Health, Minor 230
Recreation Leadership, Certificate 230
Recreation, Minor 230
Tourism, Minor 230
College of Humanities, Arts, & Social Sciences 232
Art & Creative Media Department 233
Art & Creative Media, Bachelor of Arts 238
Art & Creative Media, Minor 239
Art & Creative Media: Art History Concentration, Bachelor of Arts 240
Art & Creative Media: Creative Media Concentration, Bachelor of Fine Arts 241
Art & Creative Media: K-12 Teacher Preparation Concentration, Bachelor of Arts 242
Art & Creative Media: Studio Arts Concentration, Bachelor of Fine Arts 243
Cannabis Studies, Minor 244
Chicano/a Studies, Minor 245
Creative Industry Essentials, Certificate 246
Diversity Studies, Certificate 246
English & World Languages Department 247
Advanced Spanish for the Health Professions, Certificate 261
Basic Spanish for the Health Professions, Certificate 262
Creative Writing, Minor 262
English, Bachelor of Arts 263
English, Minor 264
English: 7-12 Teacher Preparation Concentration, Bachelor of Arts 265
English: Creative Writing Concentration, Bachelor of Arts 266
Spanish, Minor 267
World Languages-Spanish, Bachelor of Arts 268
World Languages-Spanish: K-12 Teacher Preparation Concentration, Bachelor of Arts 269
World Languages-Spanish: Media & Entertainment Concentration, Bachelor of Arts 271

World Languages-Spanish: Translation Studies Concentration, Bachelor of Arts ... 272
Gaming & Immersive Media, Bachelor of Fine Arts ... 273
History, Political Science, Philosophy, & Geography Department ... 274
Colorado Studies, Certificate ... 282
Geography, Certificate ... 282
History, Bachelor of Arts ... 282
History, Bachelor of Science ... 283
History, Minor ... 284
History: 7-12 Teacher Preparation Concentration, Bachelor of Science ... 285
Legal Studies, Minor ... 286
Philosophy & Religious Studies, Minor ... 286
Political Science, Bachelor of Arts ... 287
Political Science, Bachelor of Science ... 288
Political Science, Minor ... 289
Political Science: 7-12 Teacher Preparation Concentration, Bachelor of Arts ... 290
Political Science: 7-12 Teacher Preparation Concentration, Bachelor of Science ... 291
Humanities & Social Sciences, Bachelor of Arts ... 293
Humanities & Social Sciences, Minor ... 293
Media & Entertainment Department ... 294
Media & Entertainment, Minor ... 300
Media & Entertainment: Media & Entertainment Production Concentration, Bachelor of Science ... 301
Media & Entertainment: Media, Entertainment, & Arts Management Concentration, Bachelor of Science ... 303
Media & Entertainment: Multimedia Journalism & Storytelling Concentration, Bachelor of Science ... 306
Media & Entertainment: Sports & ESports Media Concentration, Bachelor of Science ... 308
Media & Entertainment: Strategic Communication Concentration, Bachelor of Science ... 310
Military Science, Minor ... 312
Museum Studies, Minor ... 314
Music Department ... 314
Composition/Music Theory, Minor ... 334
Jazz Studies, Minor ... 334
Music, Bachelor of Arts ... 334
Music, Minor ... 337
Music: K-12 Teacher Preparation Concentration, Bachelor of Arts ... 337
Music: Music Performance Concentration, Bachelor of Arts ... 340
Organ Performance Studies, Minor ... 343
Piano Pedagogy, Minor ... 343
Music, Sound, & Audio Production, Minor ... 344
Non Profit Administration ... 344
Non Profit Administration, Minor ... 344
Psychology Department ... 345
Creative Wellness, Minor ... 349
Nutritional Psychology, Certificate ... 350
Psychology, Bachelor of Arts ... 350
Psychology, Bachelor of Science ... 351
Psychology, Minor ... 353
Social Work Department ... 353
Social Work, Bachelor of Social Work ... 358
Social Work, Masters of Social Work ... 360
Sociology, Criminology, & Anthropology Department ... 361
Anthropology, Minor ... 372
Criminology, Bachelor of Arts ... 373
Criminology, Bachelor of Science ... 374
Criminology/Sociology Double Major, Bachelor of Arts ... 375
Criminology/Sociology Double Major, Bachelor of Science ... 376
Criminology: Community Engagement Concentration, Bachelor of Science ... 378
Sociology, Bachelor of Arts ... 379
Sociology, Bachelor of Science ... 380
Sociology, Minor ... 381
Sociology: Community Engagement Concentration, Bachelor of Arts ... 382
Sociology: Community Engagement Concentration, Bachelor of Science ... 383
Women's Studies, Minor ... 384
Veteran Studies, Minor ... 385
College of Science, Technology, Engineering, & Mathematics ... 386
Biology Department ... 387
Biology 3+2 Program, Bachelor of Science/Master of Science ... 401
Biology, Master of Science ... 403
Biology, Minor ... 404
Biology/Chemistry Double Major, Bachelor of Science ... 405
Biology: 7-12 Teacher Preparation Concentration, Bachelor of Science ... 406
Biology: Basic Biology Concentration, Bachelor of Science ... 407

Biology: Biomedical Sciences Concentration, Bachelor of Science 408
Biology: Cellular & Molecular Biosciences Concentration, Bachelor of Science 409
Biology: Environmental Biosciences Concentration, Bachelor of Science 410
Wildlife & Natural Resources: Aquatic Concentration, Bachelor of Science 411
Wildlife & Natural Resources: Terrestrial Concentration, Bachelor of Science 412
Chemistry Department 413
Biochemistry 3+2 Plan, Joint Bachelor of Science/Master of Science 422
Biochemistry, Master of Science 424
Cannabis Biology & Chemistry 3+2 Plan, Joint Bachelor of Science/Master of Science 426
Cannabis Biology & Chemistry, Certificate 427
Cannabis Biology & Chemistry, Master of Science 427
Cannabis Biology & Chemistry, Post-Baccalaureate Certificate 429
Cannabis Biology & Chemistry: Analytical Concentration, Bachelor of Science 430
Cannabis Biology & Chemistry: Hemp Agriculture Concentration, Bachelor of Science 430
Cannabis Biology & Chemistry: Natural Products Concentration, Bachelor of Science 431
Chemistry 3+2 Plan, Joint Bachelor of Science/Master of Science 432
Chemistry, Master of Science 434
Chemistry, Minor 435
Chemistry/Biology Double Major, Bachelor of Science 436
Chemistry: 7-12 Teacher Preparation Concentration, Bachelor of Science 437
Chemistry: ACS Certified Concentration, Bachelor of Science 438
Chemistry: Basic Chemistry Concentration, Bachelor of Science 439
Chemistry: Biochemistry Concentration, Bachelor of Science 440
Chemistry: Environmental Chemistry Concentration, Bachelor of Science 442
Engineering Technology & Construction Management Department 443
Civil Engineering Technology, Bachelor of Science in Civil Engineering Technology 447
Civil Engineering, Minor 448
Construction Management, Bachelor of Science 448
Estimating & Planning Construction Costs, Certificate 450
Construction Management, Minor 450
Construction Procurement, Certificate 450
Construction Project Manager, Certificate 451
Construction Safety, Law, & Management, Certificate 451
Surveying & Modeling, Certificate 451
Mathematics & Physics Department 452
Computational Mathematics, Minor 459
Data Analytics, Certficate 459
Math/Physics Double Major, Bachelor of Science 459
Mathematics, Bachelor of Arts 460
Mathematics, Bachelor of Science 461
Mathematics, Minor 462
Mathematics: 7-12 Teacher Preparation Concentration, Bachelor of Arts 462
Mathematics: 7-12 Teacher Preparation Concentration, Bachelor of Science 463
Physics, Bachelor of Science 464
Physics, Minor 465
Physics: 7-12 Physical Science Teacher Preparation Concentration, Bachelor of Science 465
Physics: 7-12 Teacher Preparation Concentration, Bachelor of Science 467
School of Engineering 468
Civil Engineering, Bachelor of Science in Civil Engineering 478
Engineering 3+2 Program, Bachelor of Science/Master of Science 479
Engineering, Bachelor of Science in Engineering: Mechatronics Specialization 480
Engineering, Minor 481
Graduate Certificate in Railroad Engineering, Post-Baccalaureate Certificate 481
Industrial & Systems Engineering, Master of Science 482
Industrial Engineering, Bachelor of Science in Industrial Engineering 483
Industrial Engineering, Minor 484
Lean Green Belt, Certificate 485
Mechatronics Engineering, Master of Science 485
Pre-Engineering Program 486
Six Sigma Green Belt, Certificate 486
Sustainability, Certificate 487
Sustainability, Minor 487
The Hasan School of Business 489
Accounting, Bachelor of Science in Business Administration 506
Accounting, Minor 508

Business Administration 3+2 Program, Integrated Bachelor of Science/Master of Business Administration 508
Business Administration 3+2 Program, Integrated Computer Information Systems, Bachelor of Science/Master of Business Administration 509
Business Administration 3+2 Program, Integrated Construction Management, Bachelor of Science/Master of Business Administration 510
Business Administration 3+2 Program, Non-Integrated BS, BA/MBA 512
Business Administration 3+2 Program, Non-Integrated BS,BA/MBA in Business Administration: Public Management Concentration 512
Business Administration, Master of Business Administration 513
Business Administration, Minor 514
Business Administration: Cybersecurity Concentration, Master of Business Administration 515
Business Administration: Healthcare Administration Concentration, Master of Business Administration 515
Business Administration: Public Management Concentration, Masters of Business Administration 516
Business Management, Bachelor of Science in Business Administration 516
Business Management: Agribusiness Concentration, Bachelor of Science in Business Administration 518
Business Management: Cannabis Industry Management Concentration, Bachelor of Science in Business Administration 519
Business Management: Information Technology Concentration, Bachelor of Science in Business Administration 521
Business Management: Organizational Risk & Security Management Concentration, Bachelor of Science in Business Administration 522
Business Management: Sports Industry Management Concentration, Bachelor of Science in Business Administration 524
Computer Information Systems, Bachelor of Science 525
Computer Information Systems, Minor 527
Computer Information Systems: Cyber Security Concentration, Bachelor of Science 527
Computer Information Systems: Data Analytics Concentration, Bachelor of Science 528
Computer Information Systems: Software Development Concentration, Bachelor of Science 529
Cyber Security, Minor 530
Data Analytics, Minor 531
Economics, Bachelor of Science in Business Administration 531
Economics, Minor 533
Economics: Finance Concentration, Bachelor of Science in Business Administration 533
Finance, Minor 534
Foundations of Business, Certificate 534
Health Sciences General Concentration 3+2 Plan, Integrated Bachelor of Science/Master of Business Administration: Healthcare Administration Concentration 534
Jake Jabs Certificate in Professional Entrepreneurship 536
Marketing, Bachelor of Science in Business Administration 536
Marketing, Minor 537
NSA-Designated Institution Certificate in Cyber Security Defense 537
Supervisory Management, Minor 538
Technology & Computing Instruction, Post-Baccalaureate Certificate 538
School Of Nursing 539
Nurse Educator, Post Masters Certification 549
Nurse Educator, Post-Baccalaureate Certificate 550
Nursing, Bachelor of Science in Nursing 550
Nursing: Adult/Gerontology Acute Care Nurse Practitioner Concentration, Doctor of Nursing Practice 555
Nursing: Adult/Gerontology Acute Care Nurse Practitioner Concentration, Master of Science 556
Nursing: Adult/Gerontology Acute Care Nurse Practitioner, Post Masters Certification 558
Nursing: Adult/Gerontology Acute Care/Family Nurse Practitioner Concentration, Doctor of Nursing Practice 559
Nursing: Adult/Gerontology Acute Care/Family Nurse Practitioner Concentration, Master of Science 561
Nursing: Adult/Gerontology Acute Care/Family Nurse Practitioner, Post Masters Certification 562
Nursing: Nurse Educator Concentration, Joint Bachelor of Science/Master of Science 563
Nursing: Nurse Educator Concentration, Master of Science 565
Nursing: Nurse Manager & Leader Concentration, Master of Science 566
Nursing: Population Health Concentration, Doctor of Nursing Practice 567
Nursing: Psychiatric-Mental Health Nurse Practitioner Concentration, Doctor of Nursing Practice 568
Nursing: Psychiatric-Mental Health Nurse Practitioner Concentration, Master of Science 570
Nursing: Psychiatric-Mental Health Nurse Practitioner, Post Masters Certification 571
Course Description Information 574
House Numbered Courses 575
Numbering of Courses 575
Requisites 576
Unique Courses 576
Accounting (ACCT) 577

American Sign Language (ASL) 578
Anthropology (ANTH) 579
Art, Research, & Creativity (ARC) 580
Art (ART) 582
Art History (ARH) 586
Athletic Training (AT) 587
Automotive Industry Management (AIM) 589
Biology (BIOL) 591
Business Administration (BSAD) 602
Cannabis Biology & Chemistry (CBC) 604
Center for Teaching & Learning (CTL) 605
Chemistry (CHEM) 606
Chicano Studies (CS) 612
Civil Engineering (CE) 613
Civil Engineering Technology (CET) 615
Communication & Information Design (CID) 617
Communities to Build Active STEM Engagement (CBSE) 618
Computer Information Systems (CIS) 618
Construction Management (CM) 621
Continuing Education (CNED) 622
Continuous Registration (CR) 623
Creative Wellness (CW) 623
Criminology (CRIM) 623
Culturally & Linguistically Diverse Education (CLDE) 626
Diversity Studies (DS) 627
Early Childhood Education (ECE) 628
Economics (ECON) 630
Education (ED) 632
Engineering (EN) 641
English (ENG) 648
English as a Second Language (ESL) 652
Escrow (ESCR) 653
Exercise Science & Health Promotion (EPER) 653
Extended Studies (EXST) 662
Finance (FIN) 662
French (FRN) 663
Geography (GEOG) 664
Geology (GEOL) 665
German (GER) 665
Health Science (HS) 666
History (HIST) 668
Honors (HONR) 670
Humanities & Social Sciences (HSS) 671
Institute of Cannabis Research (ICR) 671
Italian (ITL) 671
Library Archival Studies (LAS) 673
Management (MGMT) 673
Marketing (MKTG) 676
Mathematics (MATH) 677
Media & Entertainment (MAE) 681
Military Science & Leadership (MSL) 686
Music (MUS) 687
Non-Profit Administration (NPA) 706
Nursing (NSG) 706
Philosophy (PHIL) 715
Physics/Physical Science (PHYS) 716
Political Science (POLS) 719
President's Leadership Program (PLP) 722
Psychology (PSYC) 723
Reading (RDG) 727
Science (SCI) 728
Social Science (SCSC) 728
Social Work (SW) 729
Sociology (SOC) 733
Spanish (SPN) 737
Transportation Engineering (TENG) 741
University Studies (US) 741
Wildlife & Natural Resources (WANR) 741
Women's Studies (WS) 743
World Language (WL) 745
Index 747

NOTES ABOUT THIS ISSUE

Microcredentials

Microcredentials will soon be offered at CSU Pueblo!

A microcredential is an umbrella term for several types of small-scale, skill-based, earned recognitions of proficiency in a designated competency or set of competencies that can be directly linked to career growth, career change, or professional development.

A sharable digital badge is awarded upon successful completion of microcredential requirements, but the microcredential is not transcribed on a student's transcript.

New General Education

- POLS 106 Race & Ethnicity in American Democracy (GT-SS1) (3 c.h.)
  - Social Science

New Programs

Graduate Programs

- Education: Gifted Education Concentration, Master of Education (p. 149)
- Health Sciences: Pre-Accelerated Nursing Concentration, Bachelor of Science (p. 224)

Online & Print Versions

CSU Pueblo has an online and print version of each year's catalog. Minor changes can be made after the catalog is published in print form. For the most up-to-date and *official* version, please refer to the online version.

THE UNIVERSITY

Colorado State University Pueblo is a regional comprehensive state university with an enrollment of 4,000 students. CSU Pueblo provides relevant professional coursework and superior instruction with a small professor-to-student ratio for an ever-changing global economy. Students can choose from 42 undergraduate programs with 104 fields of study in the College of Science, Technology, Engineering and Mathematics; the Hasan School of Business, the College of Humanities, Arts and Social Sciences; and the College of Health, Education, and Nursing; and 14 graduate programs.

CSU Pueblo is equally committed to serving the diverse population of the region; this emphasis is reflected in the demographic characteristics of the student body. Because more than 30 percent of our students are Hispanic, the Federal Government has designated CSU-Pueblo a Hispanic Serving Institution. Besides reflecting our commitment to serve this critically important and rapidly growing segment of the student population, that designation also allows the University to compete for certain federal grant funds to support its ability to better serve all students. The University also seeks to provide a rich and diverse cultural environment that allows freedom of expression within a spirit of civility and mutual respect. The public service expected of all members of our community benefits our society - local and global - and builds our sense of citizenship.

Among its unique features, CSU Pueblo is one of seven schools in the nation to offer a degree in mechatronics, which combines electrical and mechanical engineering. The Hasan School of Business ranks among the top 15 percent of all business schools internationally with graduate and undergraduate programs in business administration accredited by the AACSB International Board of Directors. The College of Education, Engineering and Professional Studies houses an undergraduate engineering program that was ranked in the nation's top 100 by *U.S. News and World Report*. CSU Pueblo has an ever-changing campus landscape that features a newly renovated Library, a new general academic classroom building, and a newly renovated and expanded student center.

At CSU Pueblo, Student Life offerings have increased significantly with the transition of the campus from a commuter environment to a more traditional collegiate experience. Competing at the NCAA Division II level, CSU-Pueblo is a member of the Rocky Mountain Athletic Conference and offers 22 varsity intercollegiate sports and also has active intramural and club sports teams that allow students to get involved in campus life.

About Pueblo, Colorado

The city of Pueblo is a historically and culturally rich, diverse city of more than 100,000, located in the southern part of the state along the Arkansas River near the Wet Mountains and the majestic Sangre de Cristo mountain range. Pueblo enjoys ideal year-round climate with four distinct mild seasons, crisp mountain air and 300+ days of sunshine per year. Pueblo attracts outdoor enthusiasts to a full slate of summer and winter recreational activities, encompassing water sports at Lake Pueblo, biking or running along Pueblo's beautiful river trail system, golfing, tennis, hiking or skiing in the mountains to the west. The region is heavily agricultural, with large and small-scale farming and ranching, and a diverse mix of service, manufacturing, and technology industries.

Our History

Since its incorporation in 1933 as Southern Colorado Junior College to its current designation as a regional, comprehensive university, CSU Pueblo has served the changing educational, economic development, and cultural needs of the citizens of Colorado.

Years	Names
1933-37	Southern Colorado Junior College
1937-63	Pueblo Junior College
1963-75	Southern Colorado State College
1975-2003	University of Southern Colorado
2003–Present	Colorado State University Pueblo

Our Campus

CSU Pueblo spans more than 275 acres on the northeast edge of Pueblo, a culturally diverse city of approximately 112,000 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 boating on Lake Pueblo, mountain biking on the miles of nearby trails, whitewater rafting on the Arkansas River or skiing and snowboarding in the nearby mountains, the University's 4,000 students enjoy a wide range of outdoor activities. The Student Recreation Center 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, and frequent trips to provide opportunities to test those skills.

With an emphasis on student life, our Occhiato Student Center houses the Office of Student Engagement and Leadership, 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 an 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 up to 950 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.

CSU Pueblo has 22 athletic teams and is part of the Rocky Mountain Athletic Conference. The CSU Pueblo ThunderBowl houses intercollegiate programs in football, men's and women's cross country and track and field. Basketball, volleyball, and wrestling programs compete in Massari Arena, while the baseball and softball programs reside in the Rawlings Sports Complex, and soccer and lacrosse in the Art and Lorraine Gonzales Stadium.

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, and procedure, policy, financial requirement, or disciplinary arrangement set forth in this catalog whenever, in its sole discretion, it determines such action to be appropriate. Furthermore, Colorado State University Pueblo will not be responsible for any failure to present or complete any course or program or to perform any other activity, function, or obligation mentioned in this catalog. Modifications to this Catalog pertaining to the academic policies and curricular requirements of the University, its individual colleges and its individual academic programs must be reviewed and approved by the Faculty Senate in accordance with the provisions of Chapter 1 of the Faculty Handbook prior to taking effect.

Vision, Mission, Values

Colorado State University Pueblo was established by state law:

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

In 2018, the University adopted a new vision and mission, Vision 2028 (https://www.csupueblo.edu/vision2028/), one that honors the city it is located in and reclaims a label once used to describe regional comprehensive universities. The University's new vision recommits it to people and community, which reflects its DNA and provides an opportunity to re-imagine what a university and community can accomplish together. This statement further articulates the campus mission and strategic goals.

Our Vision

To establish Colorado State University Pueblo as the people's university of the Southwest United States by 2028.

Our Mission

CSU Pueblo's success will be measured by the resilience, agility, and problem-solving abilities of our diverse student population and the ways in which our graduates are able to navigate work in a rapidly changing world.

Our Values

CSU Pueblo is dedicated to interdisciplinary learning and entrepreneurship that elevate our people and our community, creates educational opportunities, foster unique collaborations, and support inclusion, access, and affordability as a gateway to the world.

Governance & Accreditation

Governance

CSU Pueblo is governed by the Board of Governors of the Colorado State University System (http://www.csusystem.edu/board-of-governors/board-members/), which also governs Colorado State University in Fort Collins and CSU Global.

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, Vice President of Enrollment Management, Communication and Student Affairs, Deans, representatives from the Classified Staff, Administrative Professional Council, and Faculty Senate, and others.

Accreditation

Colorado State University Pueblo is accredited by the Higher Learning Commission, 230 N. LaSalle St., Suite 7-500, Chicago, IL, 60604, Phone (800) 621-7440.

Equal Opportunity/Affirmative Action

Equal Opportunity/Affirmative Action Commitment & Notice of Non-Discrimination

Colorado State University Pueblo is committed to equal educational and employment opportunities and to the elimination of all forms of discrimination, protected class harassment, sexual misconduct, intimate partner violence, stalking, and retaliation. Furthermore, CSU Pueblo is committed to maintaining respectful, safe, and non-threatening educational, working, and living environments. In furtherance of this commitment, CSU Pueblo does not discriminate on the basis of age, citizenship, creed, color, disability, gender, gender expression, gender identity, genetic information, national origin or ancestry, pregnancy, race, religion, sex, sexual orientation, veteran status, or because an individual has inquired about, discussed, or disclosed their own pay or the pay of another employee or applicant. CSU Pueblo is an affirmative action/equal opportunity institution. It encourages diversity and provides equal opportunity in education, employment, all -of its programs and activities, and the use of its facilities. The University takes affirmative action to employ qualified women, racial/ethnic minorities, protected veterans, and individuals with disabilities.

CSU Pueblo complies with the Equal Pay Act, Titles IV, VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments, the Americans with Disabilities Act, as amended, Section 503/504 of the Rehabilitation Act, the Age Discrimination Act, Age Discrimination in Employment Act, the Vietnam Era Veterans' Readjustment Assistance Act, the Pregnancy Discrimination Act, Executive Order 11246, as amended, Violence Against Women Reauthorization Act of 2013, the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, the Genetic Information Nondiscrimination Act of 2008, and all civil rights laws of the State of Colorado.

The Director of Institutional Equity & Title IX Coordinator has been designated by the President as the person with overall responsibility for the implementation and maintenance of the University's affirmative action programs. The Director of Institutional Equity & Title IX Coordinator has also been designated as the University's Title IX Coordinator. As such, the Director of Institutional Equity & Title IX Coordinator is responsible for addressing compliance with all federal, state, and local laws pertaining to nondiscrimination, civil rights, access, and equity. For any inquiries or concerns regarding discrimination, protected class harassment, or sexual misconduct, please contact the Director of Institutional Equity & Title IX Coordinator. The ADA Coordinator & Intake Specialist, is the designated Americans with

Disabilities Act (ADA) Coordinator and Section 504 of the Rehabilitation Act of 1973 Coordinator.

Students and employees with inquiries or concerns regarding discrimination, protected class harassment, or sexual misconduct should contact the Director of Institutional Equity & Title IX Coordinator, Shelby Serena, at 719-549-2223, by email at shelby.serena@csupueblo.edu, or in person at the Buell Communication Center (BCC) 107.

Students seeking disability-related resources, adjustments, or who have other related concerns, should contact the Disability Resource & Support Center by phone at (719) 549-2648, by email at dro@csupueblo.edu, or in person at the Occhiato Student Center (OSC) 104.

Employees seeking disability resources and accommodations or who have other related concerns should contact the ADA Coordinator & Intake Specialist, Erin Hager, at 719-549-2210, by email at erin.hager@csupueblo.edu, or in person at the Buell Communication Center (BCC) 107.

Please visit www.csupueblo.edu/institutional-equity (https://www.csupueblo.edu/institutional-equity/) for more information.

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, veteran status, genetic information, sexual orientation, gender identity or gender expression, or pregnancy.

Colorado State University System Joint Proclamation Against Sexual Misconduct

On April 27, 2011, the CSU System along with the University issued its Joint Proclamation against Sexual Misconduct. This proclamation provides:

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.

Sexual Misconduct Reporting (Title IX & VAWA Compliance) & Employee Mandatory Reporting

All members of the University community, and their guests, have the right to be free from sexual misconduct, intimate partner violence, and stalking. To that end, the University has enacted a comprehensive Policy on Title IX, Sexual Harassment and Gender Discrimination (http://csu-pueblo-policies.colostate.edu/policy.aspx?id=173).

University policy prohibits sexual misconduct (sexual harassment, sexual exploitation, non-consensual sexual contact, and non-consensual sexual intercourse), intimate partner violence (dating violence and domestic violence), stalking, and retaliation by members of the University community. The University has zero tolerance for any of the above-mentioned behaviors and will take appropriate actions to stop the behavior, prevent its recurrence, and remedy the behavior's effects.

All Employees (except those serving in roles expressly designated to receive confidential information under University policy) are required to report any information they know about possible sexual misconduct, intimate partner violence, stalking, and retaliation to the University's Title IX Coordinator. Individuals who do not want their concerns reported to the Title IX Coordinator can contact confidential resources such as the University Counseling Center at (719) 549-2838 or the Pueblo Rape Crisis Services at (719) 549-0549.

For additional information/resources regarding sexual misconduct, intimate partner violence, stalking, or retaliation, or to report a concern/complaint, contact the Director of Compliance/Title IX Coordinator. You may contact the University's Title IX Coordinator via telephone at (719) 549-2210, via email at nicole.ferguson@csupueblo.edu or at the following address: Colorado State University Pueblo, 2200 Bonforte Boulevard, LARC 187, Pueblo, Colorado, 81001.

Please visit www.csupueblo.edu/institutional-equity (https://www.csupueblo.edu/institutional-equity/) for more information.

Campus Safety

The Clery Report

University public safety is provided by the Pueblo County Sheriff's Office in conjunction with the Office of Parking and Safety. The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act is the landmark federal law that requires colleges and universities to disclose information on security policies, crime statistics, and provide timely information about crime on and around campus. The CSU Pueblo Fire Safety and Security Report can be found at https://www.csupueblo.edu/campus-safety/index.html. (https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.csupueblo.edu%2Fcampus-safety%2Findex.html&data=04%7C01%7CJohnna.Doyle%40colostate.edu%7C41c783dd52724f65cae408da10d925b9%7Cafb58802ff7a4bb1ab21367ff2ecfc8%7C0%7C0%7C637840822063955581%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLC%7C3000&sdata=CPgVOVrPBBlA0PaKWPClzgLtkVE8vNBcLl2%2FqV3p5zI%3D&reserved=0)

The Report is compiled by the Campus Safety Team which is comprised of the following: Parking and Safety Manager (Clery Coordinator), members of the Pueblo County Sheriff's Office, Sr. Associate Vice-President for Student Affairs & Dean of Students, Director of Student

Conduct and Community Standards, Director of Environmental Systems, Members of the Office of Institutional Equity, Executive Director of Marketing Communications and Community Relations, Assistant Dean of Student Life, Deputy General Counsel.

Public Health Emergency Notification

In response to a public health emergency, the university may take any action in order to comply with any law, executive order, public health emergency order, and/or public health guidelines or recommendations, including without limitation temporarily closing or limiting access to campus and campus facilities, such as classrooms, offices, and on-campus housing, as well as temporarily closing or modifying university operations and modifying the method of academic instruction from in-person to remote or online instruction, or such other academic modifications as may be reasonable, practicable and necessary in response to a public health emergency.

In order to help protect the health and safety of the campus community and minimize disruption to the normal conduct and operations of the university, all students are required to comply with all university policies, procedures, protocols, directives and guidelines, including those relating to public health emergencies ("Public Health Emergency Rules"). The Public Health Emergency Rules may be updated, supplemented, or modified by the university at any time and for any reason, including but not limited to, complying with revised executive orders, public health orders or public health guidelines. Although the university takes reasonable steps to minimize risks to public health, the university cannot and does not guarantee protection from illness or complications that may result from illness. Students are responsible for educating themselves regarding all potential risks associated with a contagious disease and/or any other public health emergency and are required to take all necessary and reasonable steps to protect their health against contagious diseases and/or public health emergencies. Students voluntarily assume all risks related to exposure to contagious diseases and/or public health emergencies.

Tuition and fees for any academic year are approved by the Board of Governors of the Colorado State University System and are posted by the university. Students are advised that, in response to a public health emergency or potential public health emergency, some or all instruction for all or part of any particular academic year may be delivered remotely. Tuition and fees have been set regardless of the method of instruction and will not be refunded in the event instruction occurs remotely, in whole or in part, for any part of the academic year.

Campus Closure

In the case of extreme weather conditions, energy resource reductions, or situations impacting normal operating conditions, it may be necessary to curtail or shut down university operations. Decisions regarding campus closures will be made as early as possible. Closure decisions impacting on-campus and off-campus evening classes (i.e., CSU Pueblo at Colorado Springs Tower locations and Ft. Carson) will be made by 5:30 a.m. when possible. Even if conditions improve, a closure decision remains in effect for the time period specified. Announcements of class cancellations beyond an overall campus closure are the responsibility of individual instructors.

The Executive Director of Marketing, Communications and Community Relations is responsible for notifying local and regional radio and television stations of campus closures through the Flashnet Media Service. Students and staff may access closure messages for the University and other area entities by logging on to http://www.flashnews.net/rocky.html and clicking on View Current Info or signing up to receive text message notification.

To update or opt-out of Emergency Text Messages, please visit your PAWS or Employee Portal and follow the instructions. Faculty and staff should update their information with Human Resources as it changes.

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

- Campus-wide Delays and Cancellations
- Dangerous Situation
- Hazardous Materials Warning
- Severe Thunderstorm Warning
- Tornado Warning
- Blizzard Warning

If classes are cancelled, a message also will be posted on the University's home page at: http://www.csupueblo.edu (http://www.csupueblo.edu/). Class cancellations or delay notification also will include the Pueblo Transportation Company and any appropriate non-law enforcement organizations.

University Leadership

President's Cabinet

Name	Title
Valdez, Armando	President
Mackin, Gail	Provost & Executive Vice President of Academic Affairs
Humphrey, Marie	Vice President of Student Affairs
White Davis, Kristyn	Vice President of Enrollment Management & Extended Studies
Ortiz, Garrison	Chief Financial Officer
Plinske, Paul	Vice President for Athletics & Strategic Partnerships
Quintana, Jennifer	Senior Director of Human Resources

Deans & Administrators

Name	Title	Department
Belport, Susan	Interim Dean	School of Nursing
Caprioglio, Helen	Associate Provost	Office of the Provost
Donoher, William	Dean	Hasan School of Business
Doyle, Johnna	Deputy General Counsel	Office of General Counsel
Foust, Carol	Dean	College of Health, and Education
Fruland, Bonnie	Assistant Dean of Student Support and Advocacy	Student Affairs
Gonzales Manzanares, Rhonda	Dean	Library Services
Larson, Carol	Registrar	Registrar's Office

Lehmpuhl, David	Dean	College of Science, Technology, Engineering, & Mathematics
Lopez, Derek	Associate Vice President	Diversity, Equity, Inclusion & Belonging
Menjivar, Lucie	Interim Dean of Students & Assistant Dean of Student Engagement & Leadership	Student Affairs
Pena, Juanita	Controller	Office of Financial Mangement
Piquette, Jeff	Associate Dean	College of Health, Education, & Nursing
Starkey, Kathryn	Dean	Extended Studies
Steffen, Leticia	Dean	College of Humanities, Arts, & Social Sciences
Young, Gwen	Associate Dean of Student Affairs Operations	Student Affairs

Directors

Name	Title	Department
Alfonso, Gena	Senior Director & Public Information Officer	Marketing, Communication, and Community Relations
Barela, Laura	Director	Military & Veterans Success Center
Beltran, Christopher	Director of Hispanic Serving Institute Inititives	Diversity, Equity, Inclusion & Belonging
Brewer, Meg	Senior Director of the Office of Financial Mangement	Office of Financial Management
Capritta, Damian	Senior Facilities Director	Physical Plant Operations
Carrillo-Stresow, Erin	Director of Diversity, Equity & Inclusion	Diversity, Equity, Inclusion & Belonging
Frazier, Shantel	Assistant Director	Career Center
Fendrich, Chris	Director of Purchasing	Office of Financial Management
Gallegos, Monica	Director of Residence Life and Housing	Student Affairs
Gurly, Josh	Senior Director	Auxiliary Services
Hardwick, Monica	Director	Student Financial Services
Herman, David	Senior Facilities Director	Physical Plant Management
Hiniker, Justin	Director	Student Advocacy, Access & Support
Islam, MD	Director	Southern Colorado Institute of Transportation Technology
Kendall, Ryan	Associate Director for Recruitment and Outreach	Office of Admissions
Kingrey, Tiffany	Executive Director of Enrollment Strategy and Compliance	Student Financial Services
Kinney, Chad	Director	Institute of Cannabis Research
Macias, Trisha	Director of Operations	Extended Studies
Martin-White, Jennifer	Director	Human Resources & Employee Relations
McKinley-Fall, Jenna	Associate Athletic Director & Compliance	Athletics
Pocius, Adam	Executive Director IT - Pueblo Campus	Information Technology
Saunders, Lee	Executive Director	Office of Admissions
Serena, Shelby	Director of Institutional Equity, & Title IX Coordinator	Human Resources & Office of Institutional Equity
Shilling, Corey	Director of Institutional Research & Analysis	Office of the Provost
Tourgee, Andrea	Associate Director Admissions Operations	Office of Admissions
Varela, Jacobo	Director	Veterans upward bound
Vasquez, John	Executive Director of Graduate Studies & Research	Academic Affairs

ADMISSION REQUIREMENTS

Colorado State University Pueblo welcomes applications from all persons interested in post-secondary education.

The **Office of Admissions** is located in the Administration building, Room 201. Applicants should send all admission-related correspondence to the Office of Admissions, Colorado State University Pueblo, 2200 Bonforte Boulevard, Pueblo, CO 81001-4901 or email to info@csupueblo.edu. (info@csupueblo.edu) Applicants may also contact the Office of Admissions at (719)549-2462.

Prospective students may obtain information about all Colorado State University Pueblo programs and admission procedures by contacting the Visitor Center at 719-549-2418 visitorcenter@csupueblo.edu or the Office of Admissions.

For information about admission to Colorado State University Pueblo Online, see *the CSU (Colorado State University) Pueblo Online section* of this catalog. Admission standards and requirements included in this section apply only to students entering the University in Fall 2023, Spring 2024, or Summer 2024.

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. Colorado State University Pueblo is committed to providing access to a 4-year college degree to any academically prepared student. The final admission decision is based on the applicant's potential for attaining a degree at the University. Standards for each student type may be found under their respective sections.

NOTE: Acceptance into Colorado State University Pueblo does not guarantee acceptance into specific academic degree programs with additional admission requirements. Provisionally admitted students may be required to enroll in academic skill building and/or success courses as a condition of their admission.

Application Deadlines

For the best scholarship opportunities, housing accommodations, and course availability, prospective students should apply for admission as early as possible. The dates listed below are preferred deadlines. The Office of Admissions has the discretion to extend application deadlines. A submitted application is valid for **one calendar year** prior to the date of enrollment.

Semester	Date
Fall Semester	August 1
Spring Semester	January 2
Summer Semester	March 1

Enrollment Deposit

Degree-seeking first-year, second bachelors and transfer students, domestic and international, must pay a non-refundable enrollment deposit of $85 before registering for courses at Colorado State University Pueblo. The enrollment deposit will be honored for one calendar year after the date of payment. Online, correspondence, graduate and readmitting/returning students are exempt from paying the enrollment deposit.

Students should contact the Office of Admissions for questions regarding the deposit at info@csupueblo.edu or 719-549-2462.

Statement of Academic Performance

Applicants who have a GPA lower than required minimum must upload a copy of a Statement of Academic Performance to their application status page. The statement must include:

- Explanation for the lower GPA
- Any changes student has made to improve GPA
- Any steps student will take to ensure success at Colorado State University Pueblo

The statement is valid for **one calendar year**.

The academic performance committee will review all statements to determine potential for future academic success.

Appeals

Appeal process for admission to undergraduate programs

If an applicant is denied admission, the applicant has thirty (30) days from the receipt of their denial to submit an appeal to the CSU Pueblo Admissions Office by email to info@csupueblo.edu or by mail to 2200 Bonforte Blvd. ATTN: Admisisons Office ADM201 Pueblo, CO 81001.

At minimum, appeals must include the following information:

• Applicant's Full Name

• Preferred Method of Contact

• Date of Birth

• Written Statement

• Additional Documentation, if Applicable

All applicants must write a statement explaining why they are appealing the decision of the University and provide any reasoning around why they think they should be granted admission. Applicants will be encouraged to attach any additional documentation they feel will support their appeal.

The Executive Director of Admissions will conduct a full review of the candidate's admission file, the initial decision, and the appeal. The Executive Director may, at his or her discretion, request an interview either on the phone or on video call with the applicant to seek clarification or to allow the candidate to explain their case for admission in greater detail. The Executive Director will then give an independent decision based upon all information provided. The decision will be sent to the student directly via email.

Should the applicant be denied upon their appeal to the Executive Director and still wish to seek admission, they may make a final appeal to the Admission Appeal Committee, comprised of the University Provost and the Vice President of Enrollment Management. The Admission Appeal Committee will review both the original application, the appeal statement, and any other information or documents the applicant submitted in their initial appeal. Upon receipt of an applicant's complete final appeal, the Appeal Committee has 15 business days to review

the appeal before rendering a decision. After reviewing the appeal, the Committee must be in consensus to take one of the following actions:

• Deny the applicant admission to the University

• Admit the applicant to the University as “online degree” only

• Admit the applicant to the University

The decision of the Admission Appeal Committee is final and will be submitted to the applicant in writing. If an applicant is denied admission, the committee will send the applicant a final denial letter. If the applicant is admitted, they are to be admitted without any conditions, assuming that the other components of their application do not require conditions, such as for prior academic performance.

Appeal process for admission to graduate programs

For denied application for graduate school, please visit the Graduate School Appeals section (https://catalog.csupueblo.edu/graduate-school/appeals/) of the catalog.

First Year Students

First-Year Students

First-year applicants are degree-seeking students who, at the time of application, have not yet attempted college-level course work **after** high school graduation. For these students, Colorado State University Pueblo considers indicators to determine a student’s admissibility, including high school GPA, core competencies, and **optional** test scores.

Applicants Must Submit:

1. An online Colorado State University Pueblo application or Common App
2. A $25 application fee (non-refundable)
3. An official transcript of high school records or official high school equivalency exam scores (see Transcript Requirements below).

Weighted 2.3 GPA

First-year students must have a minimum weighted 2.3 high-school GPA (grade point average) on a 4.0 U.S. GPA scale. Students with less than a 2.3 GPA may be admissible if a student provides a statement regarding academic performance.

For more information, see Academic Performance in the Admission Requirements (https://catalog.csupueblo.edu/admission-requirements/) section of this catalog.

Core Competencies

Colorado State University Pueblo recommends that prospective students complete the following core competencies prior to admission:

Academic Area (Number of Units*)

- English (4)
- Mathematics (4)
- Natural Science (3)
- Social Science (3)
- World Language (1)
- Academic Electives (2)
- *Total (17)*

*An academic unit, also referred to as a Carnegie unit, is the equivalent to one full academic year of credit in a specific subject.

Optional ACT/SAT Test Scores

Students are not required to submit test scores for admission to Colorado State University Pueblo. However, some scholarships may consider ACT or SAT scores to assist in determining eligibility.

Transcript Requirements

All first-year students are required to provide an official high school transcript* at the time of application. All first-year students are required to provide a final official transcript showing high school completion. Transcripts are only considered official if issued directly to Colorado State University Pueblo Office of Admissions by the high school, school district or state department of education.

GED

Students who submit high school equivalency exam scores (including General Education Development (GED) and other state-wide approved exams) in place of high school transcripts must have the issuing agency forward official test scores (not the certificate) to Colorado State University Pueblo Office of Admissions.

Concurrent Enrollment

Students who have earned college credit through concurrent enrollment while completing high school should request official transcripts from the college or university where the credits were earned. Concurrent enrollment credits may count toward a degree at Colorado State University Pueblo but do not reclassify a first-year student as a transfer student. Transcripts are only considered official if issued directly to Colorado State University Pueblo by the college or university where the credits were earned. Students who have earned concurrent enrollment credit through Colorado State University Pueblo are not required to provide an official transcript.

*For students with non-U.S. transcripts: All international documentation must be translated, certified, and authenticated through an approved credentialing agency. For further information regarding this process, refer to the International Students Admission Requirements (https://catalog.csupueblo.edu/admission- requirements/international-students) section of the catalog.

Transfer Students

Transfer applicants are degree-seeking students who, at the time of application, have attempted college-level courseworkafter graduating high school or completing a GED program.

Applicants Must Submit:

1. An online Colorado State University Pueblo application
2. A $25 application fee (non-refundable)
3. Official transcripts from **all** previous institutions of higher learning attended (see Transcript Requirements below).
4. An official final high school transcript if the applicant has earned **fewer than 30 credit hours** of college-level coursework (see Transcript Requirements below).

Combined 2.3 GPA

Transfer students must have a minimum 2.3 combined GPA (grade point average) on a 4.0 U.S. GPA scale for all completed college-level coursework. Students with less than a 2.3 GPA may be admissible if the student provides a statement regarding academic performance.

For more information, see Academic Performance in the Admission Requirements (https://catalog.csupueblo.edu/admission-requirements/) section of this catalog.

Transfer Credits

Transfer credits are evaluated by the Office of the Registrar after admission.

Transcript Requirements

All transfer students are required to provide official transcripts* from every institution of higher learning attended. This requirement includes transcripts from unaccredited colleges or universities, transcripts for non-transferable coursework and transcripts with incomplete or withdrawn grades. The Office of Admissions requires transcripts from any undisclosed institutions that appear on any transcripts provided. Transfer students with in-progress grades must provide official final transcripts after course completion. Transcripts are only considered official if issued directly to Colorado State University Pueblo by an institution of higher learning or the custodian of the records for a closed institution.

Transfer Students with Less Than 30 Credit Hours of College-Level Coursework

All transfer students with fewer than 30 credit hours of college-level coursework are required to provide a final official transcript* showing high school completion. Transcripts are only considered official if issued directly to Colorado State University Office Pueblo Office of Admissions by the high school, school district or state department of education.

*For students with non-U.S. transcripts: All international documentation must be translated, certified, and authenticated through an approved credentialing agency. For further information regarding this process, refer to the International Students Admission Requirements (https://catalog.csupueblo.edu/admission- requirements/ (https://catalog.csupueblo.edu/admission-requirements/international-students/)international-students) section of the catalog.

Second Bachelors (Degree Plus) Students

Second Bachelor's applicants are degree-seeking students who have already earned a bachelor's degree from an accredited institution.

Applicants Must Submit:

1. An online Colorado State University Pueblo application
2. A $25 application fee (non-refundable)
3. Official transcripts from **all** previous institutions of higher learning attended (see Transcript Requirements below).

Combined 2.3 GPA

Second bachelor's students must have a minimum 2.3 combined GPA (grade point average) on a 4.0 U. S. scale for all completed college coursework. Student with less than a 2.3 GPA may be admissible if student provides a statement regarding academic performance.

For more information, see Academic Performance in the Admission Requirements (https://catalog.csupueblo.edu/admission-requirements/) section of this catalog.

Transcript Requirements

All second bachelor's students are required to provide official transcripts* from every institution of higher learning attended. This requirement includes transcripts from unaccredited colleges or universities, transcripts for non-transferable coursework and transcripts with incomplete or withdrawn grades. The Office of Admissions requires transcripts from any undisclosed institutions that appear on any transcripts provided. Second bachelor's students with in-progress grades must provide official final transcripts after course completion. Transcripts are only considered official if issued directly to Colorado State University Pueblo by an institution of higher learning or the custodian of the records for a closed institution.

*For students with non-U.S. transcripts: All international documentation must be translated, certified, and authenticated through an approved credentialing agency. For further information regarding this process, refer to the International Students Admission Requirements (https://catalog.csupueblo.edu/admission- requirements/international-students) section of the catalog.

Returning Students

Returning applicants are degree-seeking students who are reenrolling to complete a previously unfinished degree at Colorado State University Pueblo.

Applicants Must Submit:

1. An online Colorado State University Pueblo application
2. Official transcripts from **all** institutions of higher learning attended after Colorado State University Pueblo enrollment (see Transcript Requirements below).

Combined 2.3 GPA

Returning students must have a minimum 2.3 combined GPA (grade point average) on a 4.0 U.S. GPA scale for all completed college-level coursework. Student with less than a 2.3 GPA may be admissible if student provides a statement regarding academic performance.

For more information, see Academic Performance in the Admission Requirements (https://catalog.csupueblo.edu/admission-requirements/) section of this catalog.

Transcript Requirements

All returning students are required to provide official transcripts* from every institution of higher learning attended **after** their enrollment at Colorado State University Pueblo. This requirement includes transcripts from unaccredited colleges or universities, transcripts for non-transferable coursework and transcripts with incomplete or withdrawn grades. The Office of Admissions requires transcripts from any undisclosed institutions that appear on other transcripts provided. Returning students with in-progress grades must provide official final transcripts after course completion. Transcripts are only considered official if issued directly to Colorado State University Pueblo by an

institution of higher learning or the custodian of the records for a closed institution.

*For students with non-U.S. transcripts: All international documentation must be translated, certified, and authenticated through an approved credentialing agency. For further information regarding this process, refer to the International Students Admission Requirements (https://catalog.csupueblo.edu/admission- requirements/international-students) section of the catalog.

Graduate Students

Graduate applicants are degree-seeking students who, at the time of enrolling in the graduate program, have a conferred bachelor's degree* from an accredited institution of higher learning.

*Current CSU Pueblo undergraduate students may be admitted to a 3+2 program without a conferred bachelor's degree after earning 60 undergraduate credit hours. All 3+2 students must submit the online Colorado State University Pueblo graduate application.

Applicants Must Submit:

1. An online Colorado State University Pueblo application
2. A $35 application fee (non-refundable)
3. Official transcripts from all previous institutions of higher learning attended (see Transcript Requirements below).
4. A personal statement.
5. Specific program requirements. See individual program pages in this Catalog for additional program requirements.
6. Additional leveling courses may be required to address undergraduate deficiencies.

All completed graduate applications are reviewed by the individual program director/coordinator. The graduate program director/coordinator has the discretion to admit or deny admission based on the applicant's potential for success and/or program capacity.

Cumulative 3.0 GPA from Bachelor's Degree program

Graduate applicants must have a minimum 3.0 cumulative GPA (grade-point average) on a 4.0 U.S. scale for bachelor's degree coursework. Students with less than a 3.0 GPA may be admissible if granted conditional admission by the individual program director/coordinator. Some 3+2 programs require a GPA higher than 3.0. See individual program pages in this Catalog for additional information.

Conditional Admission

Applicants who do not meet minimum requirements may be admitted conditionally. The decision to conditionally admit a graduate student is at the discretion of the individual graduate program director/coordinator. A conditionally admitted student must satisfy all conditions of admission before completing 12 credit hours of graduate coursework.

Transcript Requirements

All graduate students are required to provide official transcripts* from every institution of higher learning attended. This requirement includes transcripts from unaccredited colleges or universities, transcripts for non-transferable coursework and transcripts with incomplete or withdrawn grades. The Office of Admissions requires transcripts from any undisclosed institutions that appear on any transcripts provided. Graduate students with in-progress grades must provide official final transcripts after course completion. Transcripts are only considered official if issued directly to Colorado State University Pueblo by an institution of higher learning or the custodian of the records for a closed institution.

*For students with non-U.S. transcripts: All international documentation must be translated, certified, and authenticated through an approved credentialing agency. For further information regarding this process, refer to the International Students Admission Requirements (https://www.csupueblo.edu/admissions/prospective-students/international-students/admissions-requirements/graduate-students.html) section of the catalog.

Graduate Returning Students

Graduate returning applicants are degree-seeking students who are reenrolling to complete a previously unfinished graduate degree at Colorado State University Pueblo. A graduate returning student must reapply to the SAME unfinished graduate degree program, and must be in good standing and eligible to return to the program.

Applicants Must Submit:

1. An online Colorado State University Pueblo application
2. Official transcripts from all institutions of higher learning attended after Colorado State University Pueblo enrollment (see Transcript Requirements below).
3. A personal statement.
4. Specific program requirements. See individual program pages in this Catalog for additional program requirements.

Transcript Requirements

All graduate students are required to provide official transcripts* from every institution of higher learning attended. This requirement includes transcripts from unaccredited colleges or universities, transcripts for non-transferable coursework and transcripts with incomplete or withdrawn grades. The Office of Admissions requires transcripts from any undisclosed institutions that appear on any transcripts provided. Graduate students with in-progress grades must provide official final transcripts after course completion. Transcripts are only considered official if issued directly to Colorado State University Pueblo by an institution of higher learning or the custodian of the records for a closed institution.

*For students with non-U.S. transcripts: All international documentation must be translated, certified, and authenticated through an approved credentialing agency. For further information regarding this process, refer to the International Students Admission Requirements (https://www.csupueblo.edu/admissions/prospective-students/international-students/admissions-requirements/graduate-students.html) section of the catalog.

International Students

International students are degree-seeking students who are seeking an F1 or J1 visa.

Applicants Must Submit:

1. The online Colorado State University Pueblo application.
2. A $30 undergraduate application fee, or a $35 graduate application fee (non-refundable)

3. Official transcripts of **all** work completed either in high school or college (or the equivalent).
4. Demonstration of English proficiency. (Residents of the United Kingdom, Ireland, Australia, New Zealand, and Canada are exempt from this requirement).
5. Copy of unexpired passport
6. Financial Statement

Transcripts:

All international documentation must be translated, certified, and authenticated through an approved credentialing agency. For further information regarding this process, refer to the International Students Admission Requirements (https://catalog.csupueblo.edu/admission-requirements/international-students) section of the catalog.

English-proficiency:

International students from non-exempt countries must email one of the following documents to the Office of Admissions at info@csupueblo.edu.

- U.S. transcript reflecting full-time attendance in a degree program with a GPA of 2.5 or higher for 2 or more semesters.
- Results of an English language proficiency test. (See requirements below).

English-proficiency requirements for all programs (except Nursing and MBA)

- A minimum score of **500** on the Test of English as a Foreign Language (TOEFL) paper-based test, a minimum score of **61** on the TOEFL internet-based (iBT);
- A minimum band score of **5.5** on the International English Language Testing System (IELTS) Academic test; or
- A minimum score of **90** on Duolingo English Test (accepted for **undergraduate** programs only).

English-proficiency requirements for Nursing and MBA programs.

- A minimum score of **550** on the Test of English as a Foreign Language (TOEFL) paper-based test, a minimum score of **79-80** on the TOEFL internet-based (iBT) **or**
- A minimum band score of **6.0** on the International English Language Testing System (IELTS) Academic test

The Office of Admissions reserves the right to accept alternative documentation on a case-by-case basis.

Passport:

International students must provide a copy of an unexpired passport. A copy of an unexpired passport for any accompanying dependents must also be provided. (Only applies to students who require an F1 or J1 student visa to attend in-person classes).

Financial Statement:

A financial statement regarding the resources available to the student during their stay in the United States is required. International students must demonstrate the financial ability to meet the **full** cost-of-attendance and cannot be admitted without this statement. (Only applies to students who require an F1 or J1 student visa to attend in-person classes). The financial statement can include one, or a combination of the following documents:

- A Certificate of Balance from a bank or other financial institution that is dated within the last six months which identifies the account owner by name, identifies the currency type, provides the account balance **as of the end** of the statement period, identifies the bank or financial institution address, and bears the signature and stamp of the bank or financial institution official.
- A Formal Loan Agreement from a lender dated within the last 30 days which identifies the borrower by name, identifies the currency type for the loan, provides the guaranteed loan amount, identifies the address of the lending institution, and bears the signature and stamp of the lending institution official.
- Scholarship letter(s).

Non-U.S. Institution Transcript Requirements

For degree-seeking students with foreign credentials, Colorado State University Pueblo requires students to provide and pay for translated, certified, and authenticated documents via a third-party agency authorized by the National Association of Credential Evaluation Services. The credential evaluation is required of both international and domestic students who have previously attended a non-U.S. institution as a **degree-seeking** student.

The evaluation report must include a copy of the international credential and contain the following items:

- Evaluation and verification of official documentation,
- US equivalence for each education credential,
- Course-by-course analysis; including credits,
- Unit (high school), credit (University-level), and grade equivalents;
- Established US equivalent degree or years of study for higher education documents submitted,
- US grade-point average (GPA) on a 4.0 scale,
- Date of graduation; if applicable, and
- Accrediting body information.

In addition, first-year students must email or mail official transcripts to Colorado State University Pueblo that shows high school completion before the end of the first semester of enrollment. All transcripts must bear the official seal of the issuing institution and must be sent by that institution. Official electronic transcripts should be emailed to info@csupueblo.edu. The official transcripts should be mailed to:

Office of Admissions
Colorado State University Pueblo
Administration Building
2200 Bonforte Blvd.
Pueblo, CO 81001

The following agencies are approved by CSU Pueblo, but credentials for other NACES member agencies will be accepted if they meet the criteria outlined above. The agencies list in **bold** are recommended for a more rapid acceptance and evaluation of transfer credits. Select the course-by-course or divisional course analysis option when ordering and evaluation.

- A2Z Evaluations LLC (https://www.a2zeval.com/)
- Academic Evaluation Services, Inc. (https://aes-edu.org/website/home/)
- **Educational Credential Evaluators, Inc.**
- Educational Perspectives (https://www.edperspective.org/)
- Educational Records Evaluation Service (https://www.eres.com/)

- Foreign Academic Credential Service, Inc. (https://facsusa.com/)
- Foundation for International Services, Inc. (https://www.fis-web.com/)
- Globe Credential Evaluators, Inc. (https://www.gceus.com/)
- International Consultants of Delaware, Inc. (https://icdeval.com/)
- **International Education Evaluations, Inc.**
- **Span Tran**
- **World Education Services, Inc.**

Colorado State University Pueblo reserves the right to require official transcripts at any time during the application process and to rescind any offer of admission made if:

- *discrepancies between unofficial and official transcripts are found.*
- *it is discovered that the educational history was incomplete.*
- *there is any suspected forgery of the unofficial transcripts.*
- *upon final GPA and degree verification, it is discovered that the minimum admission requirements were not met.*

Non-Degree Students

Non-degree seeking students (guest students) represent those not enrolled in a degree or certificate program. All non-degree or guest students are **ineligible** for institutional aid. Guest students may enroll in courses on a space-available basis. All guest students must be advised and may enroll no earlier than one week before term begins.

Applicants Must Submit:

An online Colorado State University Pueblo application.

- Students enrolling as a guest in 100-499 level courses need to apply as “undergraduate non-degree”
- Students enrolling as a guest in 500+ level courses need to apply as a “graduate non-degree”

Non-degree students are comprised of the following categories:

Guest Student – No Credit

The guest student (no credit) category is reserved for applicants who wish to enroll in courses without degree-seeking status. A guest (no credit) student may enroll in a maximum of 6 hours per term. In place of a grade for each course, students receive the symbol AU (no credit) posted on transcript for guest courses. Extended Studies, CSU Online and Independent Studies courses cannot be taken for "no credit".

Guest Student – For Credit (Undergraduate)

The guest student (for credit) category is reserved for applicants who wish to enroll in undergraduate courses without degree-seeking status. A guest (for credit) student may enroll in a maximum of 15 hours per term. A total of 30 semester hours may be earned while classified as a non-degree (guest) student. A guest (for credit) student who wishes to exceed the 30-semester hour maximum must formally apply for admission to a degree program. A guest (for credit) student must maintain a 2.0 cumulative grade-point average.

Guest Student – For Credit (Graduate)

The graduate guest student (for credit) category is reserved for applicants who wish to enroll in graduate (500+) level courses without degree-seeking status. Graduate guest (for credit) students are limited to earning a maximum of 12 credit hours (or 27 credit hours for School of Education) of graduate credit while classified as a non-degree student. A student who wishes to exceed the maximum number of credit hours permitted must seek approval of the Graduate Studies Board, or formally apply to a graduate program. Guest students must seek the approval of the individual graduate program director/coordinator to enroll in *any* graduate-level courses that are part of a graduate program curriculum.

Guest Student -Senior Citizen

The guest student (senior citizen) category is reserved for applicants 65 years and older (or 62 years and retired) who wish to audit courses, tuition-free, without earning credit. Mandatory course fees may apply. Permission of the instructor is required. In place of a grade, senior-citizen guests receive the symbol AU (no credit) posted on transcript for guest courses. Extended Studies, CSU Online and Independent Studies courses cannot be audited.

Guest Student –Military Veterans No Credit

Pursuant to the passage of House Bill 22-1407, any United States Military veteran who wishes to audit courses, tuition free without earning credit may do so at CSU Pueblo. A veteran student may audit up to 9 credit hours per term. Once enrolled as a veteran non-degree-seeking not-for-credit student, the student may not change any course to a for-credit model at any time during or after the course takes place. Mandatory course fees may apply. Permission of the instructor is required. In place of a grade, military and veteran guests receive the symbol AU (no credit) posted on transcript for guest courses. Veteran students wishing to utilize this program need to apply for admission as a Non-Degree Seeking student and either provide their DD-214 form or visit the CSU Pueblo Military Veterans Success Center, OSC Rm 114, to confirm veteran status. In place of a grade for each course, students receive the symbol AU (audited - no credit) on their transcripts. Extended Studies, CSU Online and Independent Studies courses cannot be audited.

Contact Military and Veteran Success Center for veteran information Colorado State University-Pueblo | Military and Veteran Success Center | CSU-Pueblo (csupueblo.edu) (https://www.csupueblo.edu/military-and-veteran-success-center/)

Guest Student – For Credit (National Student Exchange)

See *National Student Exchange section* of the academic catalog.

National Student Exchange

National Student Exchange (NSE) Students

National Student Exchange students are considered non-degree-seeking students participating in a study abroad program. Applicants interested in applying for National Student Exchange must first arrange acceptance into this program with the NSE coordinator in the Center for International Programs & Inclusive Excellence at 719-549-2329.

Applicants Must Submit:

1. An online Colorado State University Pueblo application. NSE students apply as non-degree students (undergraduate or graduate).
2. An unofficial copy of all college transcripts (email to the NSE coordinator at victoria.ruiz@csupueblo.edu)
3. Demonstration of English proficiency. (Residents of the United Kingdom, Ireland, Australia, New Zealand, and Canada are exempt from this requirement).

4. Copy of unexpired passport for student and passport for any accompanying dependents.
5. Financial Statement

Demonstration of English-proficiency:

NSE students from non-exempt countries must email one of the following documents to the Office of Admissions at info@csupueblo.edu.

- U.S. transcript with a GPA of 2.5 or higher for 2 or more semesters.
- Results of an English language proficiency test. (See requirements below).

English-proficiency requirements for all programs (except Nursing and MBA)

- A minimum score of **500** on the Test of English as a Foreign Language (TOEFL) paper-based test, a minimum score of **61** on the TOEFL internet-based (iBT) **or**
- A minimum band score of **5.5** on the International English Language Testing System (IELTS) Academic test.

English-proficiency requirements for Nursing and MBA programs.

- A minimum score of **550** on the Test of English as a Foreign Language (TOEFL) paper-based test, a minimum score of **79-80** on the TOEFL internet-based (iBT) **or**
- A minimum band score of **6.0** on the International English Language Testing System (IELTS) Academic test **or**
- The Office of Admissions reserves the right to accept alternative documentation on a case-by-case basis.

Financial Statement:

A financial statement regarding the resources available to the student during their stay in the United States is required. International students must demonstrate the financial ability to meet the **full** cost-of-attendance and cannot be admitted without this statement. (Only applies to students who require an F1 or J1 student visa to attend in-person classes). The financial statement can include one, or a combination of the following documents:

- A Certificate of Balance from a bank or other financial institution that is dated within the last six months which identifies the account owner by name, identifies the currency type, provides the account balance **as of the end** of the statement period, identifies the bank or financial institution address, and bears the signature and stamp of the bank or financial institution official.
- A Formal Loan Agreement from a lender dated within the last 30 days which identifies the borrower by name, identifies the currency type for the loan, provides the guaranteed loan amount, identifies the address of the lending institution, and bears the signature and stamp of the lending institution official.
- Scholarship letter(s).

RESIDENCY

All Colorado state institutions of higher learning shall apply uniform rules as outlined in the Colorado Residency Statutes of the Colorado Department of Higher Education 23-7-101. Colorado residency for tuition purposes is governed by State Law Title 23, Article 7 of the Colorado revised Statues of 1973, as amended, and by judicial decision 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 state statute and is not free to make exceptions to the rules except as specifically permitted by State Law.

Initial Classification

Initial residency classification is determined by the Office of Admissions based on information provided by the student during the application process. Students are responsible for contacting the Office of Admissions with any residency questions prior to the start of the academic term.

Changes in Tuition Classification

- A student who feels that the initial residency classification was based on discrepant or missing information in the application may submit the Residency Information Form. The Residency Information Form must be submitted **prior to the end of first term of attendance**.
- A student who desires to be reclassified as a Colorado resident or feels that the initial residency classification was based on discrepant or missing information **after the end of the first term of attendance** may file a Petition for Residency. The petitioner must submit the electronic Petition for Residency (https://www.csupueblo.edu/admissions/residency/forms.html) form along with uploaded supporting documents prior to the petition deadline. (See **Deadlines** section below). The Colorado State University Pueblo Tuition Classification Officer reviews and determines the residency based on the petition responses and supporting documents. The burden of proof rests upon the petitioner to submit a complete residency petition and all required documentation.
- WUE (Western Undergraduate Exchange) students who wish to petition for Colorado residency must forego WUE status for a **full calendar year (12 continuous months)** prior to residency reclassification.
- WICHE graduate students automatically qualify for the equivalent of the in-state tuition rate. See Western Interstate Commission for Higher Education website for a list of participating states https://www.wiche.edu/tuition-savings/wrgp/wrgp-savings-finder/school-details/?schoolID=0011H00001Q1eJQAZ.

Appeal Process

Decisions made by the Tuition Classification Officer may be appealed to the Colorado State University Pueblo Residency Appeals Committee. A student who wants to appeal the decision to the Residency Appeals Committee must contact the Office of Admissions no later than the appeal date listed in Tuition Classification Officer petition determination letter. The decision of the Residency Appeals Committee is the FINAL University determination for that specific semester. In addition, there are no provisions in the Colorado Tuition Classification Statutes for retroactive petitioning.

Deadlines

Semester	Date
Residency Form	Last Day of First Term of Attendance
Fall Residency Petition	First Monday in August
Spring Residency Petition	First Monday in December
Summer Residency Petition	Third Friday in April
Petition Appeal	Appeal Date Listed on Petition Determination Letter

Residency petitions will not be accepted after the deadline date. Residency petitions submitted after the deadline will be reviewed for future academic terms only.

Any student who provides false information to avoid paying out-of-state tuition may be subject to legal and/or disciplinary actions.

Residency Definitions

Colorado Residency Statute 23-7-102 provide the following residency definitions.

Domicile means a person's true, fixed, and permanent home and place of habitation. It is the place where a person intends to remain, or expects to return after leaving an institution without intending to establish a new domicile elsewhere.

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

Unemancipated minor means an individual who has not attained the age of twenty-three years. The domicile of an unemancipated minor is presumed to be that of the minor's custodial parent(s). A minor may qualify for residency based on the domicile of said minor's court-appointed legal guardian if the guardianship has been in effect for a minimum of one calendar year (12 continuous months).

Emancipated minor means a minor whose parents have entirely surrendered the right to the care, custody, and earnings of such minor, no longer are under any duty to support or maintain such minor, and have made no provisions for the support of such minor.

An emancipated minor must:

- Not receive financial support of any nature for any purpose. Support includes funds that may have previously been set aside for current support even if those funds are in the minor's name.
- Not be claimed on parent(s) or guardian(s) tax return.
- Not take a loan to meet financial needs on which a parent or guardian is a co-signer.
- Document an ability to meet all of one's own financial obligations without any financial help from any other individual.

Parent-qualified student means an unemancipated minor who is not domiciled in Colorado but who has a parent domiciled in Colorado.

Qualified person means an individual qualified to determine one's own domicile. Examples of a qualified person are:

- Adults who are 23 years old or older.
- Parent(s) or legal guardian(s) of an unemancipated minor
- Emancipated minors (less than 23 years old)
- Married minors (less than 23 years old)*
- Graduate student

*Marriage to a Colorado resident does not by itself qualify a student for in-state tuition status. A marriage may be considered evidence of "intent" to be considered a Colorado resident, an individual must maintain one's own domicile in Colorado for one calendar year (12 continuous months) to establish residency.

Residency Requirements

A Colorado resident, for tuition classification purpose, is a qualified person who has established domicile in the State of Colorado. The qualified person establishes residency for a minor (as defined by Colorado state residency statute).

A Colorado resident must demonstrate domicile through:

- Physical presence in the state of Colorado for 12 continuous months prior to the first day of classes, **and**
- Evidence of intent to establish permanent and legal Colorado residency **and**
- Absence of evidence that ties the qualified individual to other states

F1/J1 visa-holders cannot establish domicile in the State of Colorado without a change in immigration status.

Examples of physical presence include:

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

Examples of evidence of intent to establish Colorado residency include:

- Colorado Driver's License or State ID
- Colorado motor vehicle registration
- Colorado tax returns
- Ownership of residential real property in Colorado
- Off-campus employment in Colorado
- Withholding of Colorado income tax from wages for work performed at an off-campus employer
- Colorado voter registration

No one factor by itself is sufficient to establish intent.

Examples of ties to another state include:

- Driver's License or State ID issued by another state
- Tax filings in another state
- Filing a Colorado non-resident tax return
- Maintenance of a home in another state
- Vehicle registered in another state
- Prolonged absence from Colorado
- Residing in another state between academic terms while not enrolled at Colorado State University Pueblo
- Any other factor peculiar to the qualified person which establishes a permanent home in another state such as voting in another state or obtaining student loans and financial aid from another state.

An applicant's inability to qualify for in-state tuition classification in any other state does not guarantee in-state status in Colorado. In-state classification is governed solely by Colorado statute. The tuition classification statute places the burden of proof on the petitioner to provide clear and convincing evidence of a change in eligibility for in-state tuition once the student has enrolled.

Exception to Domicile Requirements

Students may be exempt from the one-year domicile requirement if they meet an exception in one of the following categories.

Colorado High School Graduates

Students who complete high school in Colorado will be granted in-state tuition if:

- The student attended a public or private high school in Colorado for **at least one** year immediately preceding the date student graduated from a Colorado high school **or** the student was physically present in Colorado for **at least one** year immediately preceding the date the student successfully completed a General Equivalency Diploma (GED) in Colorado **and**
- The student has been present in Colorado for **at least 12 consecutive months** prior to enrolling in an institution.

Applicants are required to provide proof of high school attendance to the Office of Admissions at info@csupueblo.edu or 719-549-2462 prior to the start of the first academic term.

Four-Year Rule

An unemancipated minor may be classified as a Colorado resident if:

- the minor's parent(s) had a Colorado domicile for at least four year before moving to another state **and**
- the minor had attended a Colorado high school for at least three years **and**
- the minor enrolled in a Colorado public college or university within 3 years and six months after the minor's parent(s) left Colorado.

Applicants are required to provide proof of high school attendance to the Office of Admissions at info@csupueblo.edu or 719-549-2462 prior to the start of the first academic term.

Economic Incentive Programs

A student may be eligible for in state tuition if the student's current employer relocated company operations to Colorado as a result of receiving an incentive from the Colorado Office of Economic Development if:

- the student was employed at the same company prior to relocation, **and**
- the student has established domicile in Colorado as defined by state statute.

Relocating Companies

In-state tuition can be granted to an employee and an employee's children who moved to Colorado in the 12 calendar months preceding enrollment as a result of an employer move to Colorado. Applicants must provide documentation that the company relocated to Colorado as a result of receiving:

- an incentive from Colorado office of economic development **or**
- an incentive from a local government economic incentive program

Applicants are required to provide proof of relocation and Colorado domicile to the Office of Admissions at info@csupueblo.edu or 719-549-2462 prior to the start of the first academic term.

Dependent Children of New Faculty

Dependent children of new faculty qualify for in-state tuition.

A faculty member is defined as an academic faculty with regular and special appointments of 50% time or greater. Adjunct faculty and administrative professionals do not qualify.

A dependent child must be:

- unmarried
- enrolled as an undergraduate student
- under the age of 23 on or before the first term of enrollment at Colorado State University Pueblo.

Applicants are required to provide proof of relationship and dependency to the Office of Admissions at info@csupueblo.edu or 719-549-2462 prior to the start of the first academic term.

Other Tuition Classification Categories

Students may be classified as Colorado residents or an alternative residency classification if they meet the non-resident exceptions in one of the following categories.

ASSET

An ASSET student who does not have lawful immigration status may be classified as an in-state student for tuition purposes if:

- The student attended a public or private high school in Colorado for **at least one** year immediately preceding the date student graduated from a Colorado high school **or** the student was physically present in Colorado for **at least one** year immediately preceding the date the student successfully completed a General Equivalency Diploma (GED) in Colorado **and**
- The student has been present in Colorado for **at least 12 consecutive months** prior to enrolling in an institution **and**
- The student submits an affidavit stating
  - the student does not have lawful immigration status but has applied for lawful presence **or**
  - The student does not have lawful immigration status but will apply as soon as the student is eligible.

Graduate applicants must meet the above requirements and must be continually pursuing college-level course work after graduating from a Colorado high school.

Students interested in ASSET classification should contact Victoria Obregon, Assistant Director College Assistance Migrant Program at 719-549-2402 or victoria.obregon@csupueblo.edu to complete a Colorado ASSET form.

Non-Citizen

Persons who are lawful permanent residents or who are admitted as refugees are eligible to establish domicile for tuition purposes after one year of Colorado residence. Non-immigrant aliens who are residing *in Colorado for purposes other than education* may qualify for in-state status after one year of Colorado residence. The non-immigrant categories subject this provision are determined by the Colorado Commission on Higher Education.

Non-immigrants in the following categories cannot qualify for in-state tuition: F-1, F-2, H-3, J-1, M-1 and M-2.

- H-4 will qualify unless the visa holder is the spouse of child of an H-3.
- J-2 will qualify if the J-1 visa holder is not a student or trainee.
- H-1B, L, K, V, E, O and P visa may qualify.

Applicants are required to provide proof of lawful permanent residence or visa status to the Office of Admissions at info@csupueblo.edu or 719-549-2462 prior to the start of the first academic term.

Military & Dependents

Active-duty members of the armed forces of the United States shall be eligible for in-state tuition upon moving to Colorado on a permanent change-of-station basis or on a temporary assignment. A dependent member of the armed forces is eligible for in-state tuition when the active-duty member moves to Colorado on a permanent change-of-duty station basis. The military member must have reported to a duty station in the State of Colorado by the first day of class of the applicable academic term for the military member or dependent to receive in-state tuition classification.

To retain domicile during an absence from Colorado due to military orders, military personnel must maintain Colorado as their legal state of residence for tax purposes and voters must maintain Colorado voter registration.

Military dependents who are continuously enrolled in a Colorado institution of higher learning continue to qualify for in-state tuition if the military member is transferred to another duty station outside Colorado.

A military member (and dependents) may qualify for in-state tuition if the military member:

- was previously domiciled for 12 continuous months in Colorado prior to enlistment in the military **and**
- has permanently returned to Colorado within 6 months of discharge from the military.

Colorado National Guard members (and dependents) who maintain sole residency in Colorado shall receive in-state tuition at any institution of higher education in Colorado.

The military exception expires for dependents effective with the:

- first term after the retirement of the military member **or**
- first term after loss of dependent status (unless the dependent can establish domicile).

However, children of a military member who attended their senior year of high school in Colorado while the military member was active duty qualify for in-state tuition.

Contact Military and Veteran Success Center for information and documentation at https://www.csupueblo.edu/military-and-veteran-success-center/index.html or 719-549-2910.

Armed Forces Veterans & Dependents

Honorably discharged members of the Armed Forces qualify for in-state tuition classification if the honorably discharged veteran

- has established domicile in Colorado for any length of time prior to enrolling at Colorado State University Pueblo **and**
- enrolls in courses with the educational assistance benefits pursuant to chapter 30 or 33 of U.S.C. title 38.

Dependents of honorably discharged members of the Armed Forces qualify for in-state tuition classification if the dependent

- has established domicile in Colorado for any length of time prior to enrolling a Colorado State University Pueblo **and**
- enrolls in courses with the educational assistance benefits pursuant to chapter 30 or 33 of U.S.C title 38.

Honorably discharged service members and dependents retain in-state tuition classification after veteran education benefits are exhausted so long as they continue to reside in Colorado and remain continuously enrolled in the same institution.

Contact Military and Veteran Success Center for veteran information and documentation at

https://www.csupueblo.edu/military-and-veteran-success-center/index.html or 719-549-2910.

WUE

WUE (Western Undergraduate Exchange) students automatically qualify for a tuition rate at 150% of in-state tuition. WUE students who wish to petition for Colorado residency must forego WUE status for a **full calendar year (12 continuous months)** prior to residency reclassification. See Western Interstate Commission for Higher Education website for a list of participating states https://www.wiche.edu/tuition-savings/wue/.

WICHE Graduate Students

WICHE graduate students automatically qualify for a tuition rate equal to that of in-state tuition. See Western Interstate Commission for Higher Education (https://www.wiche.edu/tuition-savings/wrgp/wrgp-savings-finder/school-details/?schoolID=0011H00001Q1eJVQAZ) website for a list of participating states.

New Mexico Reciprocity

New Mexico Reciprocity is a discount program that is applied to a **limited** number of New Mexico residents. The tuition charge for New Mexico Reciprocity students is equal to that of in-state tuition; however, these students are **not** classified as Colorado residents. The award of New Mexico Reciprocity is at the discretion of the Director of Admissions. Interested applicants should contact an admissions counselor at visitorcenter@csupueblo.edu or 719-549-2418.

Colorado American Indian Tribe Members

Colorado Senate Bill 21-029 provides that members of federally recognized American Indian tribes with historical ties to Colorado may be classified as Colorado residents eligible for in-state tuition beginning with the Fall 2021 semester.

The State of Colorado represents the ancestral home places of *at least* forty-eight federally recognized American Indian tribes as designated by the Colorado Commission of Indian Affairs. A complete list of the legacy tribes can be found on the Colorado Commission of Indian Affairs website CO Tribal contact list 1550 September2021.docx (colorado.gov) (https://ccia.colorado.gov/sites/ccia/files/documents/CO%20Tribal%20contact%20list%201550%20September2021.docx.pdf).

Applicants are required to provide proof of tribal affiliation to the Office of Admissions at info@csupueblo.edu or 719-549-2462 prior to the start of the first academic term.

Olympic Athletes

An Olympic athlete may qualify as an in-state student for tuition purposes if the athlete is in residence in Colorado Springs **and**

- is in training at the United States Olympic Training Center at Colorado Springs in a program approved by the governing body for the athlete's Olympic sport **or**
- is in training at a facility in Colorado Springs approved by the governing body for the athlete's Olympic sport and in a program approved by such body.

Olympic athletes are determined to be Colorado residents for tuition classification purposes only.

Applicants must submit a signed Olympic Athlete Verification form (https://www.csupueblo.edu/admissions/residency/forms.html) to the Office of Admissions at info@csupueblo.edu or 719-549-2462 prior to the start of the first academic term.

Canadian Military & Dependents

Any member of the military forces of Canada stationed in Colorado, or the dependent of any such member, shall be determined a Colorado resident for tuition classification. The Canadian military member must maintain a full-time principal residence in the State of Colorado. In-state tuition status will end for Canadian military personnel or their dependents at the conclusion of the semester upon transfer to any duty station outside the State of Colorado.

Canadian Military Personnel are determined to be Colorado residents for tuition classification purposes only.

Applicants are required to provide proof of primary residence, Canadian military service and dependency (if required) to the Office of Admissions at info@csupueblo.edu or 719-549-2462 prior to the start of the first academic term.

Peace Corps Volunteers

Any Peace Corps Volunteer can be determined as a Colorado resident for tuition classification if the student is certified the by director of the Peace Corps as having served satisfactorily as a Peace Corps Volunteer.

Peace Corps Volunteers are determined to be Colorado residents for tuition classification purposes only.

Applicants must submit the Peace Corps Certification (https://www.csupueblo.edu/admissions/residency/forms.html) form to the Office of Admissions at info@csupueblo.edu prior to the start of the first academic term.

STUDENT FINANCIAL SERVICES

Financial Aid

Financial aid is a resource for students and parents seeking monetary assistance to help pay 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.csupueblo.edu/student-financial-services/index.html (http://www.csupueblo.edu/student-financial-services/).

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

Financial Aid Application Steps

1. Complete a **Free Application for Federal Student Aid** (FAFSA) by March 1. Students may apply online at www.studentaid.gov (http://www.studentaid.gov/). The CSU Pueblo school code is: 001365
2. Complete the CSU Pueblo Foundation Scholarship application by March 1. Students may apply online at: http://www.csupueblo.edu/student-financial-services/Scholarships (http://www.csupueblo.edu/student-financial-services/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 for Satisfactory Academic Progress;
3. In default on a federal student loan;
4. Owe money back on a federal student grant or federal loan over aggregate or have not made satisfactory arrangements to repay it; or
5. Ineligible non-citizens or not permanent residents of the United States.

Student Financial Services Policies

Student Rights & Responsibilities

Please note: Students can only be communicated with (or responded to) via their CSU Pueblo student email accounts in regards to Financial Aid.

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

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

- Accurately and honestly complete the Free Application for Federal Student Aid (FAFSA) and CSU Pueblo Foundation School Application each year by the priority deadline of March 1st
- 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 maintain eligibility for certain 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.
- Drop or 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.)
- Pay any balance to CSU Pueblo that is not covered by financial aid.
- Monitor your CSU Pueblo e-mail account for important financial aid information.
- View your balance due, financial aid offer, and other individual student information via your student portal.

Satisfactory Academic Progress Policy (SAP)

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/semester) against the following qualitative and quantitative standards:

Cumulative Grade Point Average (GPA)

2.0 for undergraduate programs, 3.0 for graduate programs. GPA is not rounded: 1.99 does NOT meet the 2.0 requirement.

Completion Percentage (Pace)

At least 67% 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/semester. Successfully passing grades are S or D- and higher; all others (U, F, W, I, AU, and repeated coursework – see below) count as unsuccessful credit hours attempted. Completion rate is also not rounded: 66.99% does NOT meet the requirement.

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

hours attempted. Please note this is specifically in reference to repeating identical coursework at CSU Pueblo. Credits accepted as transfer credits that may count as equivalent to coursework offered here at CSU Pueblo do not count as course repetition.

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

Unofficial Withdrawals: Students who do not earn passing grades for the period of enrollment (the grade point average for the period of enrollment is 0.00) are placed on Financial Aid Suspension without warning period (see Evaluation below for more details on Student Financial Services Suspension) unless cumulative SAP standards are met.

Incompletes: At the time of evaluation (the end of each period of enrollment/semester), Incompletes (grade of I) 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/semester which may affect financial aid eligibility for that period of enrollment/semester can contact Student Financial Services for further evaluation.

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

Maximum Time Frame

Undergraduate students - attempted credit hours may not exceed 150% of the degree/certificate program

Graduate students - attempted credit hours may not exceed 100% of the degree/certificate 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/semester, after the Registrar's 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 or their Academic Plan, and students who have independently regained eligibility.
- **Warning** – First period of enrollment/semester where cumulative minimum SAP requirements are not met. This status does not apply to those with a 0% Pace or 0.00 GPA in their initial period of enrollment/semester with CSU Pueblo. Warning status is not appealable but students are still eligible for financial aid.
- **Suspension** - Failing to meet minimum SAP requirements outlined above. Students may appeal eligibility. Please see below for appeal procedures.
- **Probation** - Allows the student to regain minimum cumulative requirements after one period of enrollment/semester after approval of a SAP appeal and successfully completing other appeal requirements. Student will be eligible for aid for one period of enrollment/semester only on this status.
- **Academic Plan** - Allows the student to meet SAP requirements over a period of time. The student's status will be reviewed at the end of each period of enrollment/semester to determine if they can remain on an Academic Plan status by meeting semester based SAP academic plan requirements. Failure to meet semester minimum requirements will result in student returning to a suspension status.

Appeal Procedure

Students may appeal SAP suspension twice during the course of their degree completion. Students may appeal their SAP Suspension by emailing the Student Financial Services main email at financialaid@csupueblo.edu. The appeal must explain what extenuating circumstances occurred and a plan for corrective action. Students must also submit any third-party documentation of their extenuating circumstances. Students exceeding maximum time frame must also provide a graduation plan showing remaining required courses for degree completion. The Financial Aid Committee will review the students appeal and render a decision. The Committee may ask for additional information or an academic plan. The Committee's decision is final. Students will be notified of the Committee's decision via their campus email account. Students who have an appeal approved will generally have one semester to correct their deficiencies, or must meet the requirements set by the academic plan. Students whose appeals are not approved may regain financial aid eligibility only by meeting the SAP cumulative standards.

Appeal Deadlines

- Fall – First Friday of Fall semester
- Spring – First Friday of Spring semester
- Summer – Students planning to attend summer courses need to plan for payment of their bill knowing in advance they are aid ineligible and their appeal may not be reviewed or approved until the coming regular semester.

The above deadlines are priority deadlines for SAP appeals. Appeals may be submitted after this date, but Student Financial Services cannot guarantee review before the drop period or reinstatement of financial aid eligibility.

Academic Plans

All students who appeal successfully and are subsequently placed on Academic Plan or Probation will automatically have a minimum Academic Plan consisting of at least 2.0 GPA and 67% completion rate (3.0 GPA and 100% completion rates for graduate students) within subsequent periods of enrollment/semesters. The Financial Aid Committee will further develop Academic Plans for individual students based on their 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 a SAP Academic Plan and the Academic Improvement Plan from the Pack Center. 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 Registrar's Office in Fresh Start situations. These two policies also have separate appeal procedures.

This SAP policy supersedes all other CSU Pueblo SAP policies published on the web and/or in prior catalogs.

Total University Withdrawal Policy

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

1. Students must begin the Official Withdrawal Form with your advisor.
2. Students must speak with a Financial Aid Counselor.
3. Students must speak with student billing to discuss any balance owed or payment arrangements.
4. Students must turn in the Official Withdrawal Form with all required signatures from the above named offices to the Registrar's Office to finalize the withdrawal.

This process ensures proper notification of instructors for grading purposes.

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: https://www.csupueblo.edu/student-financial-services/general-policies/index.html (https://www.csupueblo.edu/student-financial-services/general-policies/).

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

# of days student completed[1]/total # of days in period of enrollment = percentage of aid earned

[1] Scheduled breaks of five or more days will be excluded from calculation.

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

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

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 their instructor completes and submits to Student Financial Services the Verification of Attendance form 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.

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

Last Date of Attendance

Student Financial Services processes federal student aid for CSU Pueblo students each academic year. As a part of the Program Participation Agreement with the Department of Education (ED), CSU Pueblo agrees to award these funds in compliance with Title IV regulations. One of these regulations requires students to meet all eligibility requirements at the time of aid disbursement. This includes student enrollment and participation in all courses for which he/she receives Title IV aid. **When a student withdraws from one or all courses during the term or if the student is awarded a non-passing grade (F or U)**, as an institution, CSU Pueblo is required to document that the student did participate in any or all courses for which he/she received Title IV aid, and to document the last day that the student attended/participated.

Financial Aid Programs

How Aid is Determined

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

COA minus EFC equals Financial Need (COA - EFC = Financial Need)

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

The Cost of Attendance includes:

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

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

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

Consortium Agreements

A Consortium Agreement is a signed document by which an individual student who is enrolled and receives financial aid at CSU Pueblo (home institution) is also taking coursework at another institution (host institution). Since financial aid is only disbursed by CSU Pueblo, the agreement allows the student's enrollment and costs at the host institution to count toward total financial aid eligibility.

Criteria for use:

- Coursework is transferable and counts toward degree at CSU Pueblo
- Student is PELL eligible
- Student is enrolled in at least 6 credits at CSU Pueblo
- Cannot be used for correspondence or remedial courses
- Student must provide proof on enrollment at the host institution
- Student must provide proof of course completion after courses are completed
- Student is responsible for paying tuition & fees at the host institution
- No CSU Pueblo financial aid will process or be disbursed until after the drop/add period
- **Consortium agreements must be submitted by the end of the drop/add period for the term in which the student is applying**

College Opportunity Fund

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

Students pursuing a second bachelor's degree (Degree Plus) may also be eligible for COF and should contact Student Financial Services for more information.

All grants are listed on our webpage: https://www.csupueblo.edu/student-financial-services/grants.html.

The following are three common need-based funds.

Federal Pell Grant

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

Colorado Student Grant (CSG)

Generally CSG is for full-time undergraduate students and is awarded to Colorado residents on the basis of financial need as determined by the Colorado Commission on Higher Education. However, based on fund availability given from the State, CSG can be awarded at a prorated amount based on enrollment of 6 credits or more. 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 depending on funding allocations. As with CSG, FSEOG is also based on fund availability given from the Federal Department of Education and can be awarded at a prorated amount based on enrollment of 6 credits or more.

Student Employment/Work Study

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 650 students in the Student Employment 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 term employed.

Colorado Work Study

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

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

Student Hourly/Stipend

Work Study General Qualifications:

1. Must be enrolled at the University as a degree-seeking student.
2. Must enroll in and maintain six (6) credit hours for each term hired.

Some departments on campus hire students and pay them directly out of their funds. This type of employment is not considered a financial aid

award, but is counted as income when filing for financial aid in the next year.

Student Loans

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

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 as determined by the FAFSA and other need based aid. The federal government pays the interest while the student is in school. Subsidized loans are only offered to undergraduate students.
- An **unsubsidized** loan is not awarded on the basis of need. Students are charged interest from the time the loan is disbursed until it's paid in full. If students allow the interest to accrue while in school or during other periods of nonpayment, it will be *capitalized*—that is, the interest will be added to the principal amount of the loan, and additional interest will be based on the higher loan 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

Federal Direct Loan interest rate is fixed. Borrowers will be notified of interest rate changes throughout the life of the loans.

Annual Loan Limits for Direct Loans
Freshman Undergraduate Student
Dependent: $5,500–only $3,500 may be subsidized
Independent: $9,500–only $3,500 may be subsidized
Sophomore Undergraduate Student
Dependent: $6,500–only $4,500 may be subsidized
Independent: $10,500–only $4,500 may be subsidized
Junior or Senior Undergraduate Student
Dependent: $7,500–only $5,500 may be subsidized
Independent: $12,500–only $5,500 may be subsidized
Maximum Total Debt Allowed Undergraduate Student
Dependent: $31,000–only $23,000 may be subsidized
Independent: $57,500–only $23,000 may be subsidized

Graduate students may borrow up to $20,500 unsubsidized loan each academic year. Aggregate limits are also higher with a limit up to a total of $138,500 unsubsidized debt.

Minimum Credit Hours Required to Receive Student Loans

Fall/Spring Semesters
Undergraduate 6 credits
Graduate 5 credit hours

Summer Semester
Undergraduate 6 credits
Graduate 3 credit hours

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 in at least 6 credits. The interest rate is a fixed rate. 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 choose to defer payments until 6 months after the date the student ceases enrollment In at least 6 credit hours.

To be considered for University scholarship aid, students must complete the CSU Pueblo Foundation Scholarship Application. All CSU Pueblo students may apply on-line through the Student PAWS Portal, a link is posted on the Student Financial Services webpage: http://www.csupueblo.edu/student-financial-services/ Scholarships (http://www.csupueblo.edu/student-financial-services/Scholarships/). Scholarship applications must be submitted by the March 1 deadline each year. Scholarship recipients are selected by various committees. Student Financial Services also administers a number of private scholarships funded by individuals, foundations, agencies, and organizations.

Students are encouraged to visit: http://www.csupueblo.edu/student-financial-services/Scholarships (http://www.csupueblo.edu/student-financial-services/Scholarships/) for more information about scholarship searches or visit **Student Financial Services** in Administration Building, Room 212.

Impact on Financial Aid

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

Military & Veteran Success Center

The mission of the Military and Veteran Success Center (MVSC) is to offer a comprehensive experience that meets the needs of our active-duty service members, veterans and dependents from transition to graduation. The staff of MVSC will take a "student-first" approach. We are dedicated to providing excellence in customer service. The goal of the MVSC is to provide military, veteran, and dependent students with the resources and knowledge to be successful at Colorado State University-Pueblo. We assist student who wish to utilize veteran education benefits, Military TA and other military tuition assistance programs. We advocate for the military affiliated population on campus and strive to continually implement and improve processes and procedures that will help students further their education goals. The MVSC is here to assist students with educational benefits, advising, tutoring, mentoring, and financial assistance. The MVSC serves as the intermediary between students and the Department of Veteran Affairs. All students utilizing VA education

benefits: Chapters 30, 31, 33, 35, and 1606, are required to contact the MVSC, complete a veterans education benefits orientation and submit the Certification Request Form. The MVSC is located in the Occhiato Student Center, room 114. We can be reached by telephone at (719) 549-2910, or by email at veteransuccess@csupueblo.edu. Visit our website at, https://www.csupueblo.edu/military-and-veteran-success-center.

Military Tuition Assistance

The process for utilizing military tuition assistance (TA) varies per branch. If assistance is needed in utilizing TA contact at the MVSC or your base education center before starting the semester. First time users must attend a briefing through their prospective education services office to begin using benefits. For more information, please visit the MVSC website: https://www.csupueblo.edu/military-and-veteran-success-center/, call (719) 549-2910 or email csup_veteransuccess@csupueblo.edu

Scholarships

The MVSC can provide students information on various scholarships for veterans, active-duty, National Guard and Reserve, and family members.

Work Study

VA work-study employment is available to any VA education recipient who is enrolled at three-quarter time or more. Students may obtain employment at any VA approved facility. Interested students should contact the MVSC.

Eligibility

All students requesting certification of VA education benefits must apply at Va.gov/education/how-to-apply. The VA will determine the eligibility for education benenfits. The MVSC requests that you submit your Certificate of Eligibility. The MVSC processes veterans education benefits for CSU-Pueblo students each semester.

Withdrawals

When a student withdraws from one or more courses**,** the MVSC is required to report the withdraws and to document the last day that the attendance. Per Isakson & Roe Public Law 116-315, Section 1019 students will be financially responsible to the University for any courses withdrawn from.

Bureau of Indian Affairs

Students, who identify as American Indian, Eskimo or Aleut, and are 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 or visit with your tribal groups Educational Advisors.

Exit Counseling

Students who are graduating, completely withdrawing, dropping/withdrawing below 6 credits of enrollment, or otherwise not returning to the University for any reason must complete Exit Counseling if they have ever borrowed any federal loan from any educational institution. Exit Counseling is completed online at https://studentaid.gov/exit-counseling/. (Students seeking information about repayment options, grace periods and consequences of not repaying a student loan can visit Student Aid (https://studentaid.gov/) or by contacting their lender).

OFFICE OF FINANCIAL MANAGEMENT

The **Office of Financial Management** department is dedicated to the support of the instruction, research, and public service missions of Colorado State University-Pueblo by:

- Providing fiscal leadership
- Safeguarding financial assets
- Ensuring regulatory compliance
- Providing timely delivery of financial services to the University community
- Ensuring timeliness, efficiency, and productivity in our operations through the use of customer service, enhanced operating procedures and technology to provide excellence in the payments to vendor and service to our students faculty, and staff.
- Implementing systems that enable us to more accurately and efficiently meet deadlines and provide valuable financial data to our users.
- Serving our students in the most cooperative manner possible by providing timely, accurate information, prompt distribution of our financial aid resources, assistance in any area within our expertise.
- Providing necessary information to other University departments in a timely manner and continuing to enhance our operations so that financial information is readily available.

Billing

Student billing is a resource for students and parents seeking information on tuition and fees, payment due dates, College Opportunity Fund (COF), tuition appeals, request for refunds, third party, and 1098-T's. Students may obtain information from the Office of Financial Management - Student Billing in the Administration Building, Room 212 or by calling 719-549-2181. You may also email us at csup_studentbilling@csupueblo.edu.

Tuition & Fees

Tuition and fee rates can be found on-line at Tuition and Fees Information for CSU Pueblo (https://www.csupueblo.edu/office-of-financial-management/tuition-and-fees.html).

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

Delinquent Student Accounts

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

- Inability to view grades
- Administratively withdrawn
- Diplomas and official transcripts may be withheld
- Letters of Completion for graduation withheld
- Enrollment and degree verification (of National Student Clearinghouse will be restricted)
- No future course registrations allowed
- Turned over to a collection agency or Department of Revenue for tax offset

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 may be charged an additional $25 fee.

Third-Party Payments

All students who have a designated third-party sponsor making payments towards their student bill must submit an authorization form to the appropriate department prior to the drop date for each semester.

- Military students will submit their authorization forms to the Military & Veterans Success Center (MVSC).
  - Location: Occhiato Student Center (OSC) Room 114
  - Phone Number: 719-549-2910
  - Email: csup_veteransuccess@csupueblo.edu
- Concurrent students will submit their authorizations to Extended Studies.
  - Location: Library 267
  - Phone Number: 719-549-2316
  - Email: csup_extendedstudies@csupueblo.edu
- Non-Military students will send their authorization to Student Billing.
  - Administration Building Room 212
  - Phone: 719-549-2181
  - Email: csup_studentbilling@csupueblo.edu

Once the proper forms are received, invoicing for all third-party sponsors will begin to be processed after the drop date for each semester. For further information please contact the appropriate office.

Request for Refund

Refunds will no longer need to be requested. Check refunds will be processed on the 1st, 3rd, and 5th Friday of every month and direct deposit refunds will be processed daily.

Please note check refunds will be mailed to the local mailing address on file and Direct Deposit refunds can take up to 3-5 business days for students to receive once their refund has been processed.

For questions regarding financial aid payments please contact the Student Financial Services at 719-549-2753 or by emailing them at csup_financialaid@csupueblo.edu.

For questions regarding student refunds (Ex. Credit from Dropped Courses, International Refunds, and Refunds over $8,000.00) please contact Student Billing at 719-549-2181 or email us at csup_studentbilling@csupueblo.edu

Direct Deposit

Students are encouraged to set up direct deposit for financial aid disbursements, request for refunds, and payroll.

Direct deposit for financial aid refunds can be found at student portal (https://paws.aisweb.csupueblo.edu/login/), click on "Billing - account activity & tax Activity" and select "Direct Deposit - Financial Aid".

To access the Direct Deposit Authorization form for Payroll, please contact the Office of Financial Management at Phone: 719-549-2801 Fax: 719-549-2883 or Email: csup_Payroll@csupueblo.edu in the Administration Building Room 211. Forms can either be dropped off, faxed, or mailed using the information on the form. Direct Deposit forms may take seven business days to be entered into the system once submitted.

Payment Due Dates

Student Balance is due in full on the specified date on the student statement produced each month. Any remaining balance after the payment due date will be assessed a 1.5% finance charge each month a balance is carried forward. Late fees will be accessed following the drop date of each course. Drop dates can be viewed in your student portal under Registration.

Please note, late fees assessed will not be removed for pending private scholarships and/or pending private loans received after late fees have been assessed; unless approved by Office of Financial Management.

For important dates and how to pay your bill, please visit the Billing web page (https://www.csupueblo.edu/office-of-financial-management/student-billing/). For questions regarding your bill please contact Student Billing at 719-549-2181 or email us at csup_studentbilling@csupueblo.edu.

To view your billing statement please visit your student portal (https://paws.aisweb.csupueblo.edu/login/).

1098-T

1098-Ts are produced for prior calendar years (January 1st through December 31st). To access your 1098-T tax forms Prior to 2023, please visit the Heartland ECSI (https://heartland.ecsi.net/index.main.html#/access/FAQtaxDocuments?deep1098t) website.

To access 1098-T forms after 2022, please go to student portal (https://paws.aisweb.csupueblo.edu/login/), click on "Billing - account activity & tax Activity" and select "1098-T".

Due to a change in institutional reporting requirements under federal law, beginning with the 2018 tax year, we will now be reporting in Box 1 the amount of Qualified Tuition and Related Expenses you paid during the year. Colorado State University Pueblo is unable to provide you with individual tax advice, but should you have questions, you should seek the counsel of an informed tax preparer or adviser.

If you have any questions, please contact the Office of Financial Management at 719-549-2181 or email us at csup_studentbilling@csupueblo.edu.

STUDENT AFFAIRS

The Division of Student Affairs supports the University's mission by providing inclusive co-curricular learning experiences, support, and services for our diverse student population by holistically developing students to have purpose and positive impact in their communities. The organizational structure is comprised of four pillars. The pillars are Student Engagement/Events & Leadership, Student Health & Well-being, Student Life, and Student Support & Advocacy.

Student Affairs
Occhiato Student Center Suite 201
Phone: 719-549-2586

Student Engagement/Events & Leadership

Student Engagement/Events & Leadership provides students with co-curricular learning and leadership development opportunities through activities, events, student organizations, fraternity and sorority life, orientation and transition programs, and commencement which promote and enhance their student experience and provide them with a sense of belonging at the University. Student Engagement and Leadership is comprised of: Associated Students' Government; Orientation & University Events; Commencement Ceremonies; Student Involvement and Organizations; Fraternity and Sorority Life; Pack Pantry: Non-Traditional/ Commuter Student Programs; and Parent and Family Programs.

Student Health & Well-Being

The Student Health & Well-Being pillar supports student success through strategically integrated resources for total well-being. This pillar of programs and services supports both the psychological and physical well-being of university students. This integrated well-being model creates a campus culture that values health and wellness as a key component of success for students while attending the University and in their future lives. This pillar is comprised of the following units and programs: Wolfpack Wellness Center, Health Education & Promotion; and the Counseling Center.

Student Life

The Student Life pillar provides opportunities, including a broad range of programs and activities that support the social, cultural, and intellectual vitality of student life for students both off and on campus. These programs strengthen personal growth, support accountability, and community standards, and enhance good citizenship development. The Student Life pillar provides quality, student-focused programs, and services that encourage the development of an involved and educated community. This pillar is comprised of the following units and programs: Student Conduct and Community Standards; Residence Life & Housing; and Student Recreation Services & Facilities.

Student Support & Advocacy

The Student Support & Advocacy pillar helps students to reach their full potential while at the university by providing educational opportunity and increased cultural awareness through initiatives and services. This pillar empowers students by developing academic and social skills, fostering resilience, expanding awareness of resources, and cultivating the ability to navigate the communities in which they live and learn. Additionally, this unit supports the Dean's Office with Student Affairs' programs, including Pack CARES and Student Affairs' Assessment. The Center is the embodiment of this pillar. The Center promotes inclusive excellence through the Disability Resource & Support Center, CAMP, Spiritual Life, First-Generation Mentoring Programs, UnDocu Student Support, HSI Initiatives, Study Abroad, the English Language Institute, National Student Exchange, and International Programs.

Student Engagement/Events & Leadership

- Associated Student Government (p. 34)
- Commencement Ceremonies (p. 36)
- Greek Life (p. 38)
- Major Events (p. 38)
- Orientation & University Events (p. 39)
- Pack Pantry (p. 39)
- Parent & Family Programs/Orientation (p. 39)
- Student Involvement & Organizations (p. 42)

Student Health & Well-Being

- Health Education & Promotion (HEP) Program (p. 38)
- Student Counseling Center (p. 42)
- Student Health Services (p. 42)

Student Life

- Residence Life & Housing (p. 39)
- Student Conduct & Community Standards (p. 41)
- Student Recreation Services (p. 43)

Student Support & Advocacy

- CAMP (p. 34)
- Career Center (p. 35)
- Center for International Programs & Inclusive Excellence (p. 35)
- Disability Resources (p. 36)
- First-Generation Programs (p. 36)
- Pack CARES (p. 39)
- Spiritual Life (p. 41)
- Student Affairs Assessment (p. 41)

Associated Student Government

The Associated Students' Government (ASG) is the students' governing body and promotes student affairs and the general welfare of the student body. It also addresses student concerns and/or complaints regarding any campus issue. ASG works to be the voice of students and 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 Vice President. 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) 549-2151 for more information.

CAMP

The purpose of the federally-funded College Assistance Migrant Programs (CAMP) is to provide academic and financial support to assist students with migrant and seasonal farm work backgrounds in entering

college and being successful. The CAMP program at CSU Pueblo is in partnership with Kansas State University.

Services:

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

Eligibility:

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

For more information about the CAMP program, call (719) 549-2402 or stop by the office in the Center for International Programs and Inclusive Excellence in OSC 104/106.

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 Dining Etiquette Training and several Career Fairs. i.e. Industry Night, Fall Internship and Spring Career Fair(s).

All off-campus employment, full, part-time, seasonal, and internship opportunities are posted on Handshake. Every student has their own Handshake account. It can be activated through PAWS as soon as you enroll. Information such as Salary Surveys, How to Search for a Job, Dining Etiquette, Career Closet, and a variety of reference materials are also available in the Career Center.

The Career Center is located on the third floor of the University Library and Academic Resource Center (LARC), suite 360. 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.csupueblo.edu/careercenter (http://www.csupueblo.edu/careercenter/).

Center for International Programs & Inclusive Excellence

The Center

The Center for International Programs and Inclusive Excellence (The Center) develops, promotes, and supports a welcoming environment for our diverse campus community by promoting equity, educational opportunities, global understanding, and intercultural awareness where all members are valued, supported, and respected.

Located in the Occhiato Student Center (OSC), room 104/106, the Center is a space for students to seek resources and find community. Programs housed in The Center are CAMP, Spiritual Life, First-Generation Mentoring Programs, UnDocu Student Support, HSI Initatives, Study Abroad, the English Language Institute, National Student Exchange, and International Programs.

The Center staff maintains an open door policy, ensuring that every student has an opportunity to be heard and helped when needed.

Inclusive Excellence

Diversity

The Center 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, International Education Week, LGBTQ+ History Month, Native American Heritage Month, Women's History Month, Asian & Pacific Islander Heritage Month, and more.

Training

The Center provides diversity training to students throughout the academic year on topics including cultural awareness, safe zone/LGBTQ + Ally training, microaggression training, undocumented student support, and first generation college students support. Student organizations and departments can request training sessions by contacting the Center at 719-549-2329.

Academic Support

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

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 Center provides information for students to learn about educational and career opportunities. The Center staff conducts, supports, and co-sponsors programs that encourage student learning and enhance student retention such as local and national internships, conferences, and workshops.

Facilities, Technology, and Equipment

The Center offers space for students to gather and meet. There are computer workstations, study areas, a microwave, a television, and lounge seating. The Center is open from 8:00 a.m. until 5:00 p.m. Monday through Friday and offers extended hours to accommodate student organizations throughout the academic year. The Center is available upon request for the utilization of student organizations, departments, or committees by calling (719) 549-2329.

Support for International Students

International Student Orientation

All new international students to CSU Pueblo are required to participate in a mandatory orientation upon arrival. During orientation, new students will learn important information about maintaining their visa status and ways to be successful as a student. New students will be administered English, math, and reading placement exams. Results determine registration into the appropriate course(s) and do not affect admission to the University.

Advising

The Center provides advising for international students on ways to maintain their international student status and comply with visa regulations. International students will be connected to their Success Coach or Academic Advisor for assistance with registering for classes.

Activities

International students are encouraged to participate in all activities offered by CSU Pueblo. In addition, the Center hosts individual events throughout the academic year. Annual events include International Education Week, holiday celebrations, and other cultural programs.

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 in The Center. Other academic tutoring is available across campus in various academic subjects.

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 cultural borders.

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

Interested students can contact The Center and speak with the NSE coordinator, who will assist in finding the right university with the right combination of courses, facilities, and environment to meet student's academic and personal needs, and interests. The Center is located in the OSC, Suite 104/106. Phone: (719) 549-2329.

Study Abroad Programs

Colorado State University Pueblo recognizes 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 or competency in subjects offered in international settings are encouraged to contact The Center. Study abroad opportunities for CSU Pueblo students are presently available in accredited universities in France, Germany, Italy, Korea, Mexico, Spain, the Czech Republic, and Thailand. Some schools teach in English; therefore, second language proficiency may not be required.

For more information call (719) 549-2329 or email victoria.ruiz@csupueblo.edu. Contact may be made directly with the study abroad coordinator by visiting Suite 104/106 in the Occhiato Student Center.

Commencement Ceremonies

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. Petitions for exceptions to this policy must be submitted to the Provost's Office.

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.

Disability Resources

Disability Resources assists in arranging reasonable accommodations for students with documented disabilities. Such accommodations include but are not limited to adjustments to course policies, modification of testing procedures, and the provision of accessible course materials. Students with disabilities may also make requests for reasonable accommodations for non-academic services and opportunities, such as student housing.

Students must meet with Disability Resources staff to discuss accessibility needs, complete an application for services, and provide documentation of a disability. Through an interactive process with the student, the DRSC determines what accommodations will be approved and will notify students' instructors as directed by the student. More information about the process can be found on the Disability Resources website (https://www.csupueblo.edu/disability/).

Information about students' disabilities is kept confidential per the Family Educational Rights and Privacy Act (https://www.csupueblo.edu/registrar/ferpa/faq.html).

Students with documented disabilities can contact Disability Resources in person in The Center for Student Support and Advocacy in Occhiato Student Center suite 104, by phone at (719) 549-2648, or by email at csup_dro@csupueblo.edu.

Students requesting academic adjustments due to pregnancy should contact the Office of Institutional Equity (Erin Hager) by calling (719) 549-2210 or emailing erin.hager@csupueblo.edu.

First-Generation Programs

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 as well as high school students and adults in twelve southern Colorado counties and one northern New Mexico county. EOC services

are especially beneficial to individuals who seek extra assistance in navigating the procedures related to financial aid and admissions. All services are provided free of charge.

Services include:

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

For services on the CSU Pueblo campus, students and community members can call (719) 549-2457. The central office is located on the CSU Pueblo campus, Room 365 in the Library and Academic Resource Center (LARC). Satellite offices are located at Fort Carson's Education 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: https://trioeoc.wixsite.com/mysite (https://trioeoc.wixsite.com/mysite/).

TRIO Educational Talent Search

Educational Talent Search is a federally funded TRIO grant program sponsored by CSU Pueblo.

The program identifies and assists middle school and high school students from disadvantaged backgrounds who have the potential to succeed in higher education. The program provides academic, career, and financial counseling to its participants and encourages them to graduate from high school and continue on to and complete their post-secondary education. Educational Talent Search services are available to students attending Pueblo Academy of Arts, Roncalli Middle School, Risley Middle School, Central High School, East High School, Hope Academy, and South High School.

Services include:

- Academic Advising
- Mentoring Program
- Academic Skills Workshops
- Financial Literacy
- Career Exploration Activities
- College Access Programming & Support
- Field Trips & Campus tours

The main office is located on the CSU Pueblo campus. Applications are accepted year round. For more information, please contact the Educational Talent Search Office at 719-549-2538 or visit our website at https://www.csupueblo.edu/trio/talent-search/index.html. (http://www.csupueblo.edu/trio/talent-search/)

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
- 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 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: https://www.csupueblo.edu/trio/student-support-services/index.html (https://www.csupueblo.edu/trio/student-support-services/)

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 pre-collegiate experiences and services (academic, social, and cultural) necessary to matriculation into higher education and successful completion of an Associates or Bachelors degree. Upward Bound services students at County, Centennial, Central, and East high schools in Pueblo.

Services include:

- Academic year tutoring on a weekly basis at area target schools
- Six-week summer Pre-College Academy at CSU Pueblo
- Summer Bridge (transition to college) Program at CSU Pueblo
- Service learning and leadership development
- Social and cultural activities
- Continued alumni outreach and support services

The main 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.

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 offering a full computer lab with free printing, free coffee, a refrigerator and a variety of resources for veterans. Classes and services are also offered at Pikes Peak Community College and Pueblo Community College campuses. **The program, all classes, and materials are FREE for those who qualify.**

The Veterans Upward Bound staff 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 at various times. Please contact the program for the current schedule.

Please call to get complete information on how Veterans Upward Bound can benefit you or visit our website: https://www.vubcolorado.org/.

VUB Contact Information:

Colorado State University-Pueblo

2200 Bonforte Blvd,

Library and Academic Resource Center (LARC), Room 374

Pueblo, Colorado 81001-4901

Phone: (719) 549-2824; (719) 549-2875

Pueblo Community College

Phone: (719) 549-3077

Pikes Peak Community College

Phone: (719) 502-4020

Greek Life

The Office of Student Engagement and Leadership is committed to enhancing Fraternity and Sorority Life and Fraternity and Sorority affiliated students to build a Greek community where students can have a positive collegiate experience. SEAL 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. Fraternity and Sorority Life builds an inclusive

Greek community and enhances the collegiate experience by supporting opportunities for siblinghood, leadership, service, and scholarship; and to serve as liaison among the collegiate chapters, parents, alumni, international organizations, and the University to provide organizational guidance, educational programs, and resources while challenging members to live their fraternal values. Each organization also has representation on Fraternity and Sorority Council.

CSU Pueblo is proud to be the home of five national social Greek letter organizations:

1. Alpha Sigma Alpha Sorority - Zeta Pi Chapter,
2. Alpha Kappa Alpha Sorority, Inc. – Tau Tau Chapter,
3. Omega Delta Phi Fraternity – CSU Pueblo Colony,
4. Alpha Psi Lambda Co-ed Fraternity – Alpha Zeta Chapter and
5. Lambda Chi Alpha Fraternity – Delta Omega Chapter.

Contact (719) 549-2225 for more information or to learn how you can get involved with a Greek-Letter Organization.

Health Education & Promotion (HEP) Program

Our mission is to provide promotion education, healthy living, and learning opportunities in order to sustain a wellness-focused environment that further develops academics and success for students of Colorado State University Pueblo. The Health Education and Promotion (HEP) Program works with individual students, small groups and the campus/community to provide individually tailored, evidence-based prevention education and behavioral interventions.

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

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

Drug Free Schools & Communities Act (DFSCA)

CSU Pueblo maintains compliance with the Drug Free Schools and Communities Act regulations. The unlawful possession, use, or distribution of illicit drugs is prohibited. Students, faculty, or staff found in violation of campus policies will face disciplinary sanctions.

Major Events

Colorado State University Pueblo hosts a series of major events 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 also features cultural events; including dance productions, major concerts, and comedy shows. The major events series is open to the public. Events are co-sponsored by the Office of Student Engagement and Leadership, the Student Fee Governing Board, the Office of Diversity and Inclusion, and other entities around campus.

For more information, contact the Office of Student Engagement & Leadership at (719) 549-2687.

Orientation & University Events

ThunderWolf Welcome New Student Orientation (NSO), in collaboration with the Division of Student Affairs, creates an inclusive and welcoming environment for incoming students, providing opportunities for a successful transition into the CSU Pueblo campus community. Thunderwolf Welcome NSO introduces new students to the curricular and co-curricular expectations of CSU Pueblo and the resources they will need for successful completion of their degree.

New Student Orientation (NSO) also develops student leaders who participate by becoming NSO Orientation Leaders. Participating students learn to work with incoming students, while also learning new skills and working collaboratively with other student leaders. If you are interested in becoming a New Student Orientation Leader, you can visit the Student Engagement and Leadership office in OSC 102.

New Student Convocation

From the Latin convocation meaning “to call/come together”, New Student Convocation assembles the university’s campus community to celebrate the beginning of incoming students’ collegiate and academic journey here at CSU Pueblo.

At this ceremony, new students receive their "Pack On" t-shirts and learn the CSU Pueblo Fight Song with their fellow classmates. New students are also welcomed by university administrators who will participate in and lead the students through the Academic Pledge and pinning ceremony. Family members and friends are encouraged to attend. No tickets are required.

Pack CARES

The Pack CARES Team is a campus resource dedicated to assisting students who may be in distress or who may be experiencing challenging or difficult life circumstances. The Pack CARES Team also provides consultation and intervention resources when students exhibit aggressive, concerning, or disruptive behaviors. If you are worried about a CSU Pueblo student who may be struggling or whose behavior is concerning, please submit a **Pack CARES Referral**.

Circumstances that may prompt you submit a Pack CARES referral:

- A student is struggling with a difficult life circumstance or health issue;
- A student is displaying unusual or out-of-character behavior;
- A student is communicating thoughts of harm to self, others or locations;
- A student is experiencing significant loss such as the death of a family member or loss of safe housing;
- A student is missing class for an extended period of time;
- A student is non-responsive to outreach attempts;
- A student is displaying unhealthy or dangerous patterns of behavior;
- A student is experiencing a high level of stress;
- A student is displaying behavior that is disruptive or negatively impacting the classroom or work environment; or
- A student is posting concerning messages on social media.

When in doubt: Sense something - Say something. Even if you aren’t sure whether to share a concern, it’s better to submit the information you have and someone from the Pack CARES Team will respond to your concern(s). If you have an immediate, urgent concern for someone’s life/safety, call 911.

Pack Pantry

The Pack Pantry serves any student, faculty, or staff member of CSU Pueblo that is experiencing food insecurity. Currently, the pantry carries food, hygiene items, and school supplies for those in need. The pantry is a partner agency to the Care and Share Food Bank of Southern Colorado and receives and purchases food items from the Care and Share Warehouse in Pueblo, as well as in-kind donations and monetary donations from donors. The pantry is located in Occhiato Student Center 007.

CSU Pueblo community members who require food packages can visit www.csupueblo.edu/pack-pantry (http://www.csupueblo.edu/pack-pantry/), or visit the Student Engagement and Leadership office located in OSC 102.

Parent & Family Programs/ Orientation

We value our Pack Family members and know that you provide a very important role in the success of your college student. It’s important to us that families understand ways they can support their student throughout their college experience. In conjunction with New Student Orientation, we will offer special online programs for family members to learn about available resources and services for students. Parent and Family Orientation is your opportunity to become familiar with all things CSU Pueblo as you support your student through their transition. You will virtually interact with the faculty and staff behind the services and resources that will play an important role in your student’s CSU Pueblo experience. You will also receive valuable tips about what it means to be a CSU Pueblo Family member and the ways that you can be most helpful to your student during this transition and beyond.

Specific orientation requirements are posted on the website: www.csupueblo.edu/Orientation

Residence Life & Housing

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

The residence halls are home to more than 750 students. The University Residence Life and Housing Office is located in the Occhiato Student Center in Suite 201. Each hall has a front desk and staff dedicated to the building.

Most of the residence hall rooms are designed for two people living in double rooms with a shared bathroom. All of the rooms come with an extra-long twin bed, dresser, desk, and desk chair for each individual. Rooms will also include a microfridge in each room. Rooms have cable and internet access-either Ethernet or wireless as routers are not permitted within the Residence Halls.

Application Information

A $150 non-refundable application fee must accompany each application. Housing contracts are issued for the entire academic year and must include a meal plan for students living in the residence halls.

Live-On Requirement

CSU Pueblo requires all newly admitted First Year and Transfer students, under 21 years of age, with a home address outside a 50 mile radius to the university, who graduated high school or the equivalent in the preceding academic year to live on campus for two academic years (four complete academic semesters, excluding summer).

All newly admitted First Year, Transfer, and Returning students, under 21 years of age, with a home address outside a 50 mile radius to the university, who graduated high school or the equivalent two academic years prior are required to live on campus for one academic year (two complete academic semesters, excluding summer). *For example, if a student graduated high school in the 2019/2020 academic year, the student is required to live on campus for the 2020/2021 and 2021/2022 academic years. If that same student who graduated in Spring of 2020, transferred in for Fall of 2020, they would only be held to one academic year on campus.*

Students who meet one or more of the following criteria may request an exemption to the two-year live-on requirement. The exemption criteria include but is not limited to:

1. Student will commute from their parent's or guardian's home within a 50 mile radius.
2. Student has lived on campus for the equivalent of two full academic years at another University before transferring to CSU Pueblo. *Students who transfer into CSU Pueblo with only one year of live-on experience at their previous institution will only need to live on* campus at CSU Pueblo for one year.
3. Student is 21 years of age or older prior to the start of the fall semester.
4. Student is married and/or has a dependent child.
5. Student is enrolled in less than twelve credit hours or taking all online classes.
6. Student is a member of the United States military who has served for one year or more.
7. Student is exempted for medical reasons.

Students seeking an exemption from the live-on requirement for housing must complete a Housing Exemption Form and receive approval. Residence Life and Housing staff will determine if an exemption to the live-on requirement will be granted and students will be notified of the committee's decision.

All residential students are required to have a meal plan. Students failing to meet these requirements will be assigned housing and will be assessed the costs of the housing rate assigned and board charges.

Residence Hall Association

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

Crestone Residence Hall

This residence hall is home to 252 students in 72 bedroom suites. It features a laundry room, warming kitchen, a state of the art classroom, mail boxes, and meeting space. A glassed-in lounge is located on each floor. There are also card access security entrances to provide a safe living and learning environment. This building is designed for wireless internet access.

Culebra Residence Hall

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

Greenhorn Residence Hall

This residence hall offers four floors of mostly suite-styled student rooms totaling 263 beds with a lounge area and adjacent small study rooms, laundry room, mailboxes, warming kitchen, and classroom. A 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.

Contract Board (Meal Plan) Policies

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

Meal plan information can be found on the Auxiliary Services (https://www.csupueblo.edu/auxiliary-services/meal-plans.html) website.

University Village at Walking Stick (Student Apartment Housing)

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

The apartments offer high-speed Internet access in each bedroom and common area, as well as cable TV in each bedroom and common area. Each unit features individually controlled heating and air-conditioning. Each unit is two-stories. Two floor plans are available (https://www.csupueblo.edu/residence-life-and-housing/moving-on-campus/room-information.html), each consisting of 4-bedrooms and 2-bathrooms. All utilities are included in the housing plan.

Academic year occupancy begins August 21st and extends through May 7th. 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. This student community also features a spacious and inviting clubhouse, an outdoor basketball court,

park benches, and restricted on-site parking. On-site laundry is provided in the clubhouse for all University Village at Walking Stick residents.

Application Information for University Village at Walking Stick

A $150 non-refundable application fee and a $100 non-refundable restoration fee must accompany each application. University Village at Walking Stick contracts are issued for entire academic year and do not require a meal plan.

Housing for Students with Families

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

Spiritual Life

For some community members, religion and spirituality play a significant role in their identity. For others, it's something they may be curious about. Spiritual life at CSU Pueblo aims to connect interested students to faith based or spiritual communities either on campus or in Pueblo. Check Packlink for a current list of student organizations or contact the Center for International Programs and Inclusive Excellence (The Center) for more information.

Packlink: https://csupueblo.campuslabs.com/engage/

The Center for International Programs and Inclusive Excellence: OSC 104/106, 719-549-2329

Student Affairs Assessment

The purpose of assessment in Student Affairs is to evaluate our activities, programs, facilities and services based on our goals and learning outcomes. Assessment data is collected in the form of attendance tracking, surveys, focus groups, and more. Through evaluation of assessment data, the division will work to make continuous improvements within the division to ensure our learning outcomes are being met with the goal of optimizing student success.

Mission Statement for the Division of Student Affairs

The Division of Student Affairs supports the University's mission by providing inclusive co-curricular learning experiences, support, and services for our diverse student population by holistically developing students to have purpose and a positive impact in their communities.

Goals

1. Support students' holistic learning and development.
2. Promote students' sense of belonging.
3. Use assessment to inform practice and make improvements.
4. Develop student and professional staff professional competences to respond to changing needs of our diverse student population.

Council for the Advancement of Standards in Higher Education (CAS) Student Learning Domain

CAS Standards promote quality assurance, student learning, and professional integrity. The Student Learning Domains are incorporated into assessment practices in the Division of Student Affairs.

1. Knowledge Acquisition
2. Cognitive Complexity
3. Intrapersonal Development
4. Interpersonal Competency
5. Humanitarianism and Civic Engagement
6. Practical Competence

Student Affairs' Learning Outcomes

Students participating in Student Affairs activities, programs, facilities and services will:

1. Attain leadership skills that support their academic and personal development.
2. Attain and apply knowledge that will support their persistence through graduation.
3. Develop resilience and healthy life skills.
4. Recognize and appreciate differences within their own communities and of communities unlike their own.

Assessment Cycle

Learning outcomes will be assessed on a four year cycle using both qualitative and qualitative methodologies. Assessment results will be used to identify student needs and inform initiatives to promote student success.

For questions regarding assessment, please contact the Office of Student Affairs at 719-549-2586.

Student Conduct & Community Standards

The Office of Student Conduct and Community Standards at Colorado State University Pueblo supports the University's and Student Affairs' missions by providing programs and services designed to foster a positive and safe environment for student learning. The Office of Student Conduct and Community Standards strives to achieve a campus community in which individuals:

- Demonstrate respect for others, for themselves, and for the University;
- Uphold high standards of personal and academic integrity;
- Are accepting of differences and gain an appreciation for living in a pluralistic society;
- Understand the impact of their behavior both upon the University and the larger community; and
- Freely accept the responsibility for and consequences of their conduct.

Student behavior at CSU Pueblo is governed by the Student Code of Conduct (https://www.csupueblo.edu/student-conduct/), which describes the University's expectations of its students and the procedures by which allegations of misconduct, inclusive of academic integrity, will be reviewed.

Students should also be aware of other policies that inform their behavior, such as the:

- Residence Life Handbook (https://www.csupueblo.edu/residence-life-and-housing/_doc/housinghandbook.pdf)
- Information Technology Policies (http://csu-pueblo-policies.colostate.edu/policy-browse.aspx?category=7)

- Athletic Department's Student-Athlete Handbook (https://gothunderwolves.com/documents/2021/10/18/SA_Handbook_2021_22.pdf) (if applicable)

Questions about policies and procedures may be directed to the Office of Student Conduct and Community Standards, which may be reached at 719.549.2586 or by contacting the Student Conduct and Community Standards office via email at csup_conduct@csupueblo.edu.

Student Counseling Center

The Wolfpack Counseling Center is committed to providing a professional and confidential setting that meets the psychological, emotional, and developmental needs of students as they pursue their academic goals. We strive to promote culturally responsive services to assist in the student's growth and understanding of themselves to help maximize emotional wellness.

Services Offered

The Wolfpack Student Counseling Center offers traditional talk therapy as well as Acudetox, acupressure seeds, and medication management.

Confidentiality

All visits to the Wolfpack Counseling Center are kept confidential within the limitations mandated by state and federal law. If you have questions, please be sure to discuss the limitations with your counselor.

Fees

Students have 8 visits with a counselor per semester, which is paid for by student fees. Visits with the Psychiatric-Mental Health Nurse Practitioner are NOT included in the 8 visits and are based on the needs of the students to manage medication. If a student exceeds the 8 visits within the semester, there will be a charge of $10.00 per session. If a student misses an appointment without advanced notice, there will be a $10.00 no-show fee added to the students' account.

There is never a charge for crisis management or intervention. Any crisis situation is immediately evaluated and addressed without charge to the student.

The Wolfpack Counseling Center is located in the Center for Integrated Health and Human Inquiry, room 174.

Phone: (719) 549-2838.

Student Health Services

Wolfpack Wellness Center

The mission of the Wolfpack Wellness Center is to provide holistic care that promotes resiliency, agility, growth and success (R.A.G.S.) in the student population.

There is currently no charge for an appointment to see the Nurse Practitioners in the Center. Students may, however, incur charges for laboratory tests, physical and specialty exams, procedures or dispensed medications. Forms of payment include cash, check, credit or debit card and ThunderCard. There is a $10.00 no call, no show fee that will be added to the student's account if the student does not cancel a scheduled appointment.

Students are encouraged to visit the Wolfpack Wellness Center whenever necessary. The licensed professional staff consists of nationally board certified Nurse Practitioners. Patients are seen by appointment, however, walk in appointments are available and will be seen at the first available time. Appointments may be made by calling the Wolfpack Wellness Center at 719-549-2830.

All immunization records **must** be entered into the Thunderwolf Health Portal web portal within the first fourteen days of the semester. If the information is not documented, the student will not be allowed to register for classes for the following semester until the records are completed. Students will receive the form to be filled out on the web portal. Students may log in to the portal by the use of their Net ID and password. The form may be completed on-line and documentation of immunizations may be uploaded from the portal. Other forms will be available for students on the web portal such as; medical history forms, release of information forms, HIPAA privacy notice with accompanying signature, authorization to treat minors, emergency contact forms and permission to allow the Center to contact students by text messaging and appointment reminders. In the event, the student requires laboratory or diagnostic tests, the results will be available for the individual student on the web portal. The web address is the same as above, www.csupueblo.studenthealthportal.com.

- **Student vaccine requirements are subject to change and will be reflected on the immunization information page of our Wolfpack Wellness Center:** https://www.csupueblo.edu/student-health-services/immunization-and-screening.html

Wolfpack Wellness Center is located in room 172 in the Center for Integrated Health and Humanities. The telephone number is 719 549-2830. Fax number is 719 549-2646. Email is shs@csupueblo.edu or the above mentioned web portal is accessible.

Student Involvement & Organizations

Student Leadership

Leadership programs at CSU Pueblo strive to help plan and organize comprehensive leadership development programs that are designed to enhance the total learning experience for our students. Leadership Programs evaluate student needs and implements programs and activities that facilitate the learning, growth, and development of students and fosters leadership, civic engagement, and sense of community. Through leadership education, service learning and advocacy, students will become active citizens on campus, in their respective communities, and in the workplace. The Student Leadership Program is comprised of the National Society of Leadership and Success (NSLS), the Student Leadership Experience, and other Leadership Workshops held throughout the academic year.

Student Organizations

CSU Pueblo students have opportunities to take part in the activities of a number of student organizations. Students can search for student organizations and join them virtually through https://csupueblo.campuslabs.com/engage/. Students interested in starting a new recognized student organization must first find a faculty or staff member willing to advise the organization, four other CSU Pueblo students to serve as offices interested in the same group, and develop a student organization mission statement and constitution. All students then must meet with the Office of Student Engagement and Leadership to complete the process. For information, please contact the Office of Student Engagement and Leadership at (719) 549-2151.

For a current list of student organizations, please visit the Student Organization website at https://csupueblo.campuslabs.com/engage/.

Academic Organizations

- American Society of Mechanical Engineers
- Art Club
- Associated General Contractors
- Association of Computing Machinery
- Athletic Training Club
- Automotive Booster Club Jr. B3
- Chemistry Club
- CSU Pueblo Forensics Team
- CSU Pueblo Health & Wellness Club
- CSU Pueblo Student Chapter of the Wildlife Society
- Enactus
- English Club
- History Club
- Honors Club
- HSB Accounting Club
- Institute of Electrical & Electronics Engineers
- Institute of Industrial Engineering
- Marketing Club
- Math & Physics Club
- Medical Science Society
- National Association of Music Education
- Physical Educators Club
- Political Science Club
- Pre-Vet Club
- Psychology Club
- Society of Mexican-American Engineers & Scientists
- Southern Colorado Association of Nursing Students
- Student Social Work Association
- Tempered Steel Literary Magazine
- Tri Beta Biology Club

Campus-Life Organizations

- Campus Activities Board (CAB)
- Residence Hall Association

Cultural Organizations

- Black Student Union
- CSU Pueblo Ballet Folklorico
- Latino Students' Union
- PRIZM: Gay, Lesbian, Bisexual, Transgender, Ally Alliance
- Italian Club

Greek Letter Organizations

- Alpha Kappa Alpha
- Alpha Psi Lambda
- Alpha Sigma Alpha
- Fraternity & Sorority Council
- Lambda Chi Alpha
- Lambda Theta Nu
- Omega Delta Phi

Honor Societies

- Golden Key Honor Society
- Phi Alpha Theta
- Phi Alpha Zeta Delta
- Sigma Alpha Pi (National Society of Leadership & Success)

Specific Interest Organizations

- Anime Club
- Army (ROTC)
- Campus Crusade for Christ
- Fellowship of Christian Athletes
- Residence Hall Association
- Student Veterans of America
- CSU Pueblo Muslims
- CSU Pueblo Young Democrats
- Young Americans for Freedom

Student Recreation Services

ThunderWolf Recreation Services & Facilities 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
- Functional fitness room
- Locker rooms
- Lounge (Wi-Fi access) with indoor and outdoor seating area
- Health and wellness suite
- Outdoor athletic track and artificial turf field
- Outdoor challenge (ropes) course
- Outdoor Pursuits Program (equipment rental program and trips)

Sports & Competition

Club sports are a group of **student organizations** established to promote and develop the interests and skills of its members in sport-related

activities. The club sports program is **student initiated**, and the emphasis is placed on student participation. Participation in club sports is completely voluntary. Membership is open to all current students regardless of skill level. Club Sport teams practice, travel, and compete on behalf of CSU Pueblo. Current offerings include: Bass Fishing, Baseball, Men's Basketball, Climbing, Men's Rugby, Rodeo, Men's Soccer, Women's Volleyball, Racquetball, and Squash.

Intramural Sports provide the opportunity to compete in various organized, safe, and friendly sporting activities during the academic year. Our goal is for every participant to have fun and enjoy the campus community emphasizing recreation, health, wellness, teamwork, leadership, sportsmanship, and social interaction. Some of the activities offered include: flag football, soccer, basketball, volleyball, softball, arena football, ultimate frisbee, indoor soccer, table tennis, and various video game tournaments.

Group Fitness

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

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

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

Outdoor Pursuits

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

Outdoor Trips

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

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

Team Development Programs/Challenge Course

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

The 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.

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 weekdays during the fall and spring semesters

Equipment Rental Shop

The Outdoor Pursuits Program provides CSU Pueblo students with the opportunity to rent equipment for their own personal trips. Available by reservation for a modest term user fee, outdoor equipment includes but is not limited to:

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

ACADEMIC POLICIES

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

- Academic Conduct (p. 45)
- Academic Fresh Start (p. 46)
- Academic Standing (p. 46)
- Academic Year (p. 47)
- Assessment of Student Learning (p. 47)
- Attendance (p. 47)
- Awarding of Degrees (p. 48)
- Class Schedule Change (p. 49)
- Classification of Students (p. 49)
- Course Repeats (p. 50)
- Course Substitutions (p. 50)
- Course Withdrawals (p. 50)
- Equivalency Charts (p. 51)
- Experiential Education (p. 58)
- FERPA (p. 59)
- Freedom of Expression (p. 62)
- General Education (p. 62)
- Grades & Grading System (p. 65)
- Immunization Requirement (p. 66)
- Prior Learning (p. 67)
- Program Requirements (p. 68)
- Registration (p. 71)
- Student Bill of Rights (p. 72)
- Time Limit of Credit (p. 72)
- Transcript of Credit (p. 73)
- Transfer (p. 73)

Academic Conduct

Academic Misconduct

Academic misconduct is any form of cheating that results in students giving or receiving unauthorized assistance in an academic exercise or receiving credit for work that is not their own. In cases of academic misconduct, the instructor will follow protocol as identified by their department. Academic misconduct is grounds for disciplinary action by both the instructor and the Director of Student Conduct and Community Standards. Any student found to have engaged in academic misconduct may receive a failing grade for the work in question, a failing grade for the course, or any other lesser penalty that the instructor finds appropriate.

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

Academic misconduct is a behavioral issue as well as an issue of academic performance. As such, it is subject to the University conduct process as defined in the CSU Pueblo Student Code of Conduct. Whether or not disciplinary action has been implemented by the faculty, a report of the infraction should be submitted to the Office of Student Conduct and Community Standards who may initiate additional disciplinary action. The decision by the Office of Student Conduct may be appealed through the process outlined in the Student Code of Conduct.

In the event of a serious incident or repeat offense of academic misconduct in which a student is found responsible by the Office of Student Conduct and Community Standards, the Director, or designee, shall decide with the faculty member of the course (or designee in the event the faculty member may be unable to be present) whether or not the action for which the student was found responsible was so egregious to the effect that it should be noted on a student's transcript with a notation of AM. The notation of AM will indicate that the student was given the grade of F for the course as a result of a finding of Academic Misconduct. Grades marked with AM will not be eligible for grade appeal or retroactive withdrawal. A record of the infraction will remain within the Office of Student Conduct and Community Standards as detailed in the Student Code of Conduct.

What Are Specific Acts of Academic Misconduct?

The following acts are considered acts of academic misconduct:

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 misconduct—intentionally or knowingly helping or attempting to help another commit academic misconduct.
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 misconduct, but a guide to help faculty and students understand what constitutes academic misconduct.

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 and/or policy. Anyone in unauthorized attendance or causing a disturbance during scheduled academic activity may be asked to leave by the instructor. If a person refuses such a request, he or she may be removed by a deputy of the Pueblo County Sheriff's Office located at the University and may be subject to legal prosecution, as well as through the student conduct process

All communications with instructors, whether in class, face-to-face, on paper, by telephone, by email, or by other electronic means, are subject to the same standards for conduct, behavior, and discipline as classroom behavior. Standards of conduct outlined elsewhere (Student Code of Conduct, Policy on Discrimination, Protected Class Harassment, Sexual Misconduct, Intimate Partner Violence, Stalking, & Retaliation, etc.) also apply. Faculty and staff are responsible for notifying the Office of Student Conduct and Community Standards of disruption at the time of the occurrence so that proper disciplinary action may be taken. Incidents not reported when they occur may be unable to be addressed.

Academic Fresh Start

Academic Fresh Start

Fresh Start is available to a student with less than a 2.000 GPA who are returning to CSU Pueblo after at least a one year absence. Former CSU Pueblo undergraduate students who re-enroll may apply for Academic Fresh Start, a policy which allows students to establish a new academic record.

Students may request Fresh Start at any point after returning to CSU Pueblo; however, they are highly encouraged to do so within the drop period in their first semester back. Requests made after their first semester will only be approved if the student's SAP status and eligibility for financial aid would have remained unchanged in their first semester back after the Fresh Start demarcation.

Students are eligible for only one Fresh Start opportunity at CSU Pueblo.

Academic Fresh Start may be granted after at least one year has elapsed since the student's last term of enrollment as an admitted, degree-seeking student, regardless of the number of credits taken. Courses taken through Extended Studies as a guest student, or the CSU Pueblo Summer Session after being dismissed or ceasing enrollment as an admitted degree-seeking student will not count against the one-year interval required for Academic Fresh Start.

Eligibility for Fresh Start can be achieved in one or both of the following ways:

- Be successful in a job or volunteer experience and be able to supply strong letters of recommendation from your employer/supervisor (recommendations must not be from a family member or relative).
- Take at least 15 credits of academic courses either at another institution or as a guest student at CSU Pueblo and earn a 2.500 or higher cumulative GPA.

Students applying for Fresh Start will also need to:

1. Meet with the Pack Center to create an academic success plan.
2. Submit all required information to the Pack Center.
3. Complete and sign the Fresh Start form acknowledging responsibilities and details of the policy.

A student enrolled and granted Fresh Start will have a demarcation on the permanent academic record to delineate the previous record from the new academic record achieved after reenrollment and approval for Fresh Start status. Credits for those courses in which a grade of at least C or S was awarded prior to the Fresh Start may be applied toward graduation requirements under the Fresh Start policy.

Only grades earned after the Fresh Start demarcation will be computed in the new GPA. Fresh Start may have implications regarding other requirements for graduation (https://catalog.colostate.edu/general-catalog/academic-standards/graduation/), such as upper-division and in-residence requirements.

If a student receives a Fresh Start, the student must successfully complete at least 30 upper-division credits of course-work in residence at CSU Pueblo after the Fresh Start is granted in order to graduate.

Academic Standing

Good Academic Standing

The academic standing of all undergraduate students is reviewed two times each year by the Pack Center, 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 Watch & Warning

Academic Watch: At the end of any semester (excluding summer) in which a student's cumulative grade-point average falls below 2.000 they will be placed on Academic Watch.

Academic Warning: Students on Academic Watch who fail to raise their cumulative grade-point to at least a 2.000 in the subsequent semester (excluding summer) will be placed on Academic Warning.

Academic Watch and Warning will be noted on the Unofficial Academic Transcript.

Students placed on Academic Watch or Warning will receive a letter from the Pack Center. **Students are strongly encouraged to develop an Academic Improvement Plan (AIP)** in collaboration with staff from the CSU Pueblo's Pack Center.

Academic Dismissal

Students who fail to clear Academic Watch (first semester; excluding Summer) and subsequent Academic Warning (second semester; excluding summer) will be placed on Academic Dismissal.

Students placed on Academic Dismissal cannot re-enroll at the University for a period of two consecutive semesters (excluding summer) unless they successfully appeal their dismissal by the appeal deadline. Students who successfully appeal their dismissal can return to the University under Academic Watch.

Students reinstated under Academic Watch will remain under the guidelines of the catalog in effect at the time of their regular admission.

Students on Academic Dismissal who stay away from the University two consecutive semesters (excluding summer), following their notice of formal Academic Dismissal, must:

1. Apply and be readmitted to the University. (Please refer to Returning Students (p. 16))
2. Adhere to the requirements of the catalog in effect at the time they are readmitted to the University.
3. Start on Academic Watch standing and show progress in their cumulative GPA.

Academic Appeals

Students who want to appeal their Academic Dismissal are responsible for initiating the process by submitting an Appeal Letter to the Pack Center. The Appeal Letter must address two issues:

1. Why the Academic Dismissal is being appealed, and
2. What the student will do to make an improvement in academic performance.

The deadlines for Appeal Letters 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 Dismissal for two consecutive semesters (excluding summer).

Academic Year

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

Assessment of Student Learning

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

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

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

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

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

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

Attendance

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

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

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. For additional information, see Faculty Initiated Student Withdrawal (https://catalog.csupueblo.edu/academic-policies/course-withdrawal/).

Last Date of Attendance

Colorado State University Pueblo does not require that faculty take attendance. However, the U.S. Department of Education requires (34 CFR 668.22) the Office of Financial Aid to determine if a student who receives financial aid and fails to earn a passing grade in a course has actually attended and/or completed the course, or if they withdrew from a course without providing the university official notification.

In addition, for students who officially withdraw, we are required to document that they also began attending the course(s) from which they withdrew in order to determine the type and amount of financial aid they may be eligible to retain. Since a student could be a financial aid applicant at any point during the academic year, we must collect this information for all students so that financial aid eligibility can be accurately determined.

The Department of Veterans Affairs also requires the institution to determine if a student who receives Veterans Educational Benefits stops attending class. If so, the student is no longer entitled to benefits. Section 21.4203 of Title 38 Subsection (d) states "when a veteran or eligible person interrupts or terminates his or her training for any reason, including unsatisfactory conduct or progress, or when he or she changes the number of hours of credit or attendance..." this fact must be reported to the Department of Veterans Affairs by the school.

Military Leave of Absence

If a student member of the Armed Forces receives orders to deploy or temporally transfer stations for an extended period, that student may be afforded a Military Leave of Absence. The student must notify CSU Pueblo of military service and their intention to return to school as follows:

Notification of Military Service

The student (or an appropriate Officer of the Armed Forces or official of the Department of Defense) must give written notice of such service to CSU Pueblo as far in advance as is reasonable under the circumstances by completing the Military Leave of Absence Form. This notice does not have to indicate whether the student intends to return to CSU Pueblo and may not be subject to any rule of timeliness. (Timeliness will be determined by the facts in each case).

No notice is required if precluded by military necessity, such as service in operations that are classified or would be compromised by such notice. If this situation occurs, the student should submit an Attestation of Military Service that necessitated the student's absence from CSU Pueblo at the time of readmission.

Notification of Intent to Return to School

The student must also give written notice of intent to return to CSU Pueblo by completing a Military Leave of Absence Readmission Form.

The student is required to enroll in courses within three years after the completion of the period of service. Exceptions may be granted to students hospitalized or convalescing due to an illness or injury incurred or aggravated during military service.

A student who fails to apply for readmission within these periods does not automatically forfeit eligibility for readmission, but is subject to CSU Pueblo's established Leave of Absence Policy and general practices.

CSU Pueblo has designated the Office of Admissions as the main point of contact so that a student may provide notification of service and notification of intent to return. CSU Pueblo will promptly readmit the student to the semester chosen on the Military Leave of Absence Readmission Form. If the student's intended semester is in progress, the student will be admitted to the next available semester. Students who have completed coursework during the Military Leave of Absence will be required to submit official transcripts before the readmission will be processed.

CSU Pueblo must admit the student with the same academic status, which means:

- To the same program to which the student was last admitted or, if that exact program is no longer offered, the program that is most similar to that program unless the student chooses a different program,
- At the same enrollment status, unless the student has completed additional coursework while on military leave,
- With the same number of credit hours previously completed, unless the student is readmitted to a different program to which the completed credit hours are not transferable, and
- With the same academic standing (e.g., with the same satisfactory academic progress status).

If the student is readmitted to the same program, for the first academic year in which the student returns, CSU Pueblo must assess the tuition and fee charges that would have been assessed for the academic year during which the student left CSU Pueblo.

Awarding of Degrees

Graduation Contracts

A graduation contract must be filed with the Registrar's Office for a student to be eligible for degree conferral.

Graduation Contracts for Fall and Spring semesters are due no later than the fourth week of the graduating term.

Graduation Contracts for summer session are due no later than the third week of the 12-week summer session.

Students unable to complete degree requirements within the University deadlines will be required to submit a new Graduation Contract to the Registrar's Office in order to establish a new tentative degree conferral date.

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 designated as Fresh Start, and credit by examination, and any credit awarded for prior learning including escrow credit cannot be included in the 60 semester credits.

Honors Levels & Requirements

Summa Cum Laude

A minimum cumulative grade point average of 3.900 is required.

Magna Cum Laude

A minimum cumulative grade point average of 3.750 is required.

Cum Laude

A minimum cumulative grade point average of 3.500 is required.

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

Class Rank

CSU Pueblo does not maintain or provide class rank information.

Diplomas

Diplomas are dated and awarded to graduating students each semester or session (Fall, Spring, and Summer) upon graduation clearance of each student.

The Spring Commencement date and the last day of the Summer and Fall term are the dates recorded on diplomas and on the transcripts for all students fulfilling degree requirements within a degree granting period. The diploma is imprinted with the name of the degree awarded

and the student's major(s). Minors, emphases, tracks, specializations, and concentrations are **not** printed on the diploma.

Diplomas will be mailed to graduates approximately ten to twelve weeks after the end of the term in which the degree is conferred. All accounts with Colorado State University Pueblo must be settled before a diploma will be awarded. Replacement diplomas may be issued upon signed request from the original holder. Please check with the Registrar's Office for current diploma replacement fees.

Posthumous Degree

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

Please contact the Registrar's Office for specific information on this policy and process.

Class Schedule Change

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

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

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

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

Adding Courses

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

After the first week of the scheduled semester, a student can only add a course with the instructor's approval. Payment of a late fee is assessed to the student account to add courses after the drop/add period of a course has passed.

After the 5th week, a course may only be added with the approval of the instructor, the chair, and payment of a late fee. The Late Add Form must be completed in its entirety and must be submitted to the Registrar's Office (ADM 202) within 5 business days of the instructor signature.

For short-term or summer courses, the late add period is abbreviated and payment of a late fee is assessed to the student account to add courses after the drop/add period of a course has passed. Additionally, for short-term or summer courses, only the instructor signature is required.

Addition of Independent Study & Extended Studies Courses

A resident student may enroll in independent study and extended studies 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 Banner prior to the drop deadline. Some students' groups may not be able to drop below full-time status. Please contact your advisor for appropriate paperwork for this process. The drop date of each course is printed on the student's schedule.

Classification of Students

Undergraduates

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

Remedial credits (courses numbered 000-099) do not count toward student level.

Graduates

See the *Graduate Studies* section for classification information.

Guest Students

Guest Student – No Credit

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

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

Guest Student – For Credit

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

Senior Citizen

Persons 65 years of age or older, or 62 and retired, may audit courses without paying tuition on a space-available basis. A grade of AU (no credit) will be posted.

Course Repeats

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 and are explained further below).

The first two times a course is repeated, only the highest grade is calculated into students' cumulative grade-point average.

- For example, if a student earns an F, C, and 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 calculated into the GPA.

- For example, if a student earns grades F, C, D, and A in successive attempts with a course, the C and A are averaged into the student's cumulative grade-point average.

Students should be aware that some academic departments place limitations on repetition of courses for majors and/or minors. Once a degree has been posted, no repeats will be processed for the period used toward the degree.

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

Transfer Repeats

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.

Individual Courses which may be Repeatable for Credit

Generally courses cannot receive duplicate credit. However, some specified courses may be repeated for credit. These courses are designated by the word "Repeatable" in the Course Description Information (p. 574) section of this catalog. The number after the word "Repeatable" indicates the *maximum* number of credits that may be used toward degree requirements. The catalog in effect during the completion of the course will determine whether or not the course may be repeated for credit.

Course Substitutions

Substitutions, waivers, or exceptions for courses fulfilling degree requirements must be approved by the appropriate approving authority and submitted to the Registrar's Office.

CSU Pueblo courses not designated as general education may not be substituted to fulfill general education requirements, except as specifically covered under the General Education section of this catalog.

Course Withdrawals

Course Withdrawal

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 75% of the course duration has passed, a grade of "W" (withdrawal) will be recorded on the academic record. After 75% 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 Registrar's Office or through Banner. The withdrawal date of each course is printed on the student's schedule. Note that some student groups may need additional approval for withdrawals, such as for international and/or athletic compliance.

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 1 or 2 below.

1. 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 Registrar's Office by 5:00 pm on the last day of the drop period.
2. 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 and instructor are one-in-the-same) acknowledging the withdrawal may be substituted for the student's signature. The student will receive a grade of "W" for the course. Exceptions to the requirement of a student or Department Chair signature may be granted to programs by the Provost.

If a faculty member chooses to incorporate this policy, it must be stated in the course syllabus. The criteria to be met by the student which would trigger a Faculty Initiated Withdrawal of the student from the course must be stated in the policy. The criteria will also include the method by which the student will be informed by the faculty member of the impending withdrawal. As with the Student Initiated Withdrawal Policy, faculty may

not initiate a student withdrawal after the official course withdrawal period has ended.

Total Withdrawal from the University

Up until the drop period expires, students may drop full-term courses without charge by using PAWS or through the Registrar's Office. Short-term courses will have shorter drop periods. Students must refer to their course schedules for exact date for each course.

After the end of the drop period, students who are planning to withdraw from **all** courses and leave the University for any reason **must** begin the withdrawal process with the Pack Center (LARC 151) prior to departure. Total withdrawals will not be processed after the last scheduled class day of the semester. Students residing in the Residence Halls also must check out at the Housing Office.

Unless the total withdrawal procedure is followed, students are not eligible for an adjustment (if appropriate) of tuition and fees and will receive failing grades in all courses.

Retroactive Withdrawal

A student may request that all grades in previous terms be retroactively removed and replaced by entries of "W" on their transcript if they had experienced, during that term, health and/or personal problems so severe that they could not reasonably have been expected to complete the term satisfactorily.

Application for a retroactive withdrawal may occur any time after the current term and before conferral of a degree.

Appeal Process

The Retroactive Withdrawal Request form must be submitted with supporting documentation to the Registrar's Office. Documentation must include the following:

1. Specific information from a professional who can attest to the student's claim of illness or legal issues, and
2. 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 Registrar's 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 e-mail.

If a student chooses to appeal the decision of the Retroactive Withdrawal Committee (or to omit the above requested documentation), the student must submit a formal appeal including thorough documentation as listed above. The appeal must be submitted, or postmarked if mailed, to the student Academic Appeals Board no later than 20 working days after the date of the initial decision of the Retroactive Withdrawal Committee. If no appeal is received before the deadline, the Retroactive Withdrawal Committee's decision will be considered final.

The Academic Appeals Board decision is the final decision of the University.

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 term being requested is prior to the degree conferral.

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

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

Military Withdrawal

If military obligations interrupt the academic work of a member of the armed forces registered for courses, the student may ask instructors for an early termination of his or her courses. Early terminations may include, but are not limited to:

1. A withdrawal (W) recorded on the transcript,
2. An incomplete (I or 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, or
4. 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.

Equivalency Charts

Advanced Placement - Equivalency Chart

*See Legend Tab

AP Exam	Score	Course Number	Class Equivalent	Credits Received	Gen Ed Group/GT Pathways
African American Studies	3	HIST	General Education History Elective	3 credits	SS, GT-SS3
	4 or 5	SCSC; HIST	SCSC Elective; General Education History Elective	3 credits; 3 credits	SS, GT-SS3; HS, GT-HI1
Art History	3 or 4	ART 211	History of Art I	3 credits	H, GT-AH1
	5	ART 211 & ART 212	History of Art I & II	6 credits	H, GT-AH1
Art, Studio Drawing	3, 4 or 5	ART 141	Drawing I	3 credits	
Art, Studio 2D Design	3, 4 or 5	ART	Elective	3 credits	
Art, Studio 3D Design	3, 4 or 5	ART	Elective	3 credits	
Biology	3	BIOL 100 & BIOL 100L	Principles of Biology & Lab	4 credits	ST, GT-SC1 & GT-SC2

	4 or 5	BIOL 181 & BIOL 181L; BIOL 182 & BIOL 182L	Coll Biology I/ Organismal Biology & Lab; Coll Biology II/ Cellular Biology & Lab	4 credits; 4 credits	ST, GT-SC1 & GT-SC2
Calculus AB	3, 4 or 5	MATH 126	Calculus and Analytic Geometry I	5 credits	M, GT-MA1
Calculus BC	3	MATH 126	Calculus and Analytic Geometry I	5 credits	M, GT-MA1
	4 or 5	MATH 126; MATH 224	Calculus and Analytic Geometry I; Calculus and Analytic Geometry II	5 credits; 5 credits	M, GT-MA1; M, GT-MA1
Capstone (Seminar or Research)	3, 4 or 5	No Transfer	No Transfer	0 credit	
Chemistry	3	CHEM 111 & CHEM 111L	Principles of Chemistry & Lab	4 credits	ST, GT-SC1 & GT-SC2
	4	CHEM 121 & CHEM 121L	General Chemistry I & Lab	5 credits	ST, GT-SC1 & GT-SC2
	5	CHEM 121 & CHEM 121L; CHEM 122 & CHEM 122L	General Chemistry I & Lab; General Chemistry II & Lab	5 credits; 5 credits	ST, GT-SC1 & GT-SC2
Chinese Language and Culture	3	WL 101	Intro to a Critical Wrld Language I	3 credits	H, CC
	4	WL 101 & WL 102	Intro to a Critical Wrld Language I & II	6 credits	H, CC; H, CC
	5	WL 101, WL 102 & Elective	Intro to a Critical Wrld Language I & II & Elective	6 credits & 3 credits	H, CC; H, CC
Computer Science A	3	CIS	Elective	3 credits	
	4 or 5	CIS	Elective	4 credits	
Computer Science Principles	3	CIS	Elective	3 credits	
	4 or 5	CIS	Elective	4 credits	
Economics (Macroecon	3, 4 or 5	ECON 201	Principles of Macroeconc	3 credits	SS, GT-SS1
Economics (Microeconomics)	3, 4 or 5	ECON 202	Principles of Microeconomics	3 credits	SS, GT-SS1
English Language and Compositior	3 or 4	ENG 101	Compositior I	3 credits	E, GT-CO1
	5	ENG 101 & ENG 102	Compositior I & II	6 credits	E, GT-CO1 & GT-CO2
English Literature and Compositior	3 or 4	ENG 130	Intro to Literature	3 credits	H, GT-AH2
	5	ENG 101; ENG 130	Compositior I; Intro to Literature	3 credits; 3 credits	E, GT-CO1; H, GT-AH2
Environmen Science	3, 4 or 5	CHEM 125 & CHEM 125L	Environmen Science & Lab	4 credits	ST, GT-SC1 & GT-SC2
European History	3	HISTORY	General Education History Elective	3 credits	HS, GT-HI1
	4 or 5	HISTORY	General Education History Elective	6 credits	HS, GT-HI1
French Language and Culture	3	FRN 201	Intermediate French I	3 credits	H, GT-AH4
	4	FRN 101 & FRN 201	Beginning French I & Intermediate French I	3 credits & 3 credits	H & H,GT-AH4
	5	FRN 101, FRN 102 & FRN 201	Beginning French I & II; Intermediate French I	6 credits; 3 credits	H; H, GT-AH4
German Language and Culture	3	GER 201	Intermediate German I	3 credits	
	4	GER 101; GER 201	Beginning German I; Intermediate German I	3 credits; 3 credits	H
	5	GER 101, GER 102 & GER 201	Beginning German I & II and Intermediate German I	6 credits; 3 credits	H

Government & Politics: Comparative	3, 4 or 5	POLS 202	Comparative Politics	3 credits	SS
Government & Politics: United States	3, 4 or 5	POLS 101	American National Politics	3 credits	SS, GT-SS1
Human Geography	3, 4, or 5	GEOGRAPHY	Geography Elective	3 credits	SS, GT-SS2
Italian Language and Culture	3	ITL 201	Intermediate Italian I	3 credits	H, GT-AH4
	4	ITL 101 & ITL 201	Beginning Italian I; Intermediate Italian I	3 credits; 3 credits	H; H, GT-AH4
	5	ITL 101, ITL 102 & ITL 201	Beginning Italian I & II; Intermediate Italian I	6 credits; 3 credits	H; H, GT-AH4
Japanese Language and Culture	3	WL 101	Intro to a Critical Wrld Language I	3 credits	H, CC
	4	WL 101 & WL 102	Intro to a Critical Wrld Language I & II	6 credits	H, CC; H, CC
	5	WL 101, WL 102 & Elective	Intro to a Critical Wrld Language I & II; Elective	6 credits; 3 credits	H, CC; H, CC
Latin	3	WL 101	Intro to a Critical Wrld Language I	3 credits	H, CC
	4	WL 101 & WL 102	Intro to a Critical Wrld Language I & II	6 credits	H, CC; H, CC
	5	WL 101, WL 102 & Elective	Intro to a Critical Wrld Language I & II; Elective	6 credits; 3 credits	H, CC; H, CC
Music Theory	3, 4 or 5	MUSIC	Elective	3 credits	
Physics I	3, 4 or 5	PHYS 201 & PHYS 201L	Principles of Physics I & Lab	4 credits	ST, GT-SC1 & GT-SC2
Physics II	3, 4 or 5	PHYS 202 & PHYS 202L	Principles of Physics II & Lab	4 credits	ST, GT-SC1 & GT-SC2
Physics C: Electricity & Magnetism	3, 4 or 5	PHYSICS	General Education Elective & Lab	5 credits	ST, GT-SC1 & GT-SC2
Physics C: Mechanics	3. 4 or 5	PHYSICS	General Education Elective & Lab	5 credits	ST, GT-SC1 & GT-SC2
Psychology	3, 4 or 5	PSYC 100	General Psychology	3 credits	SS, GT-SS3
Spanish Language and Culture	3	SPN 201	Intermediate Spanish I	3 credits	H, GT-AH4
	4	SPN 101 & SPN 201	Beginning Spanish I; Intermediate Spanish I	3 credits; 3 credits	H; H, GT-AH4
	5	SPN 101, SPN 102 & SPN 201	Beginning Spanish I & II; Intermediate Spanish I	6 credits; 3 credits	H; H, GT-AH4
Spanish Literature	3	SPANISH	Elective	3 credits	
	4	SPANISH	Elective	6 credits	
	5	SPANISH	Elective	9 credits	
Statistics	3, 4 or 5	MATH 156	Introduction to Statistics	3 credits	M, GT-MA1
United States History	3	HIST 201	U.S. History I	3 credits	HS, GT-HI1
	4 or 5	HIST 201 & HIST 202	U.S. History I & II	6 credits	HS, GT-HI1
World History	3	HIST 110	World History to 1500	3 credits	HS, GT-HI1
	4 or 5	HIST 110 & HIST 111	World History to 1500 & after 1500	6 credits	HS, GT-HI1; HS, GT-HI1

College Level Examination Program - Equivalency Chart

*See Legend Tab

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

Name of Exam	ACE Score 7/2001-Current	Course Number	Class Equivalent	Credits	Gen Ed Group/GT Pathways
American Government	50	POLS 101	American National Politics	3	SS, GT-SS1

American Literature	50	ENG Electives	ENG Electives	3, 3	GT-AH2
Analyzing & Interpreting Literature	50	ENG 130; Elective	Intro to Literature; Elective	3; 3	H, GT-AH2
Biology	50	BIOL	Elective (No Lab Credit)	3, 3	ST, GT-SC2
Calculus	50	MATH 126	Calc & Analytic Geom I	5	M, GT-MA1
Chemistry	50	CHEM electives	Prin of Chemistry	3, 3	ST, GT-SC2
College Algebra	50	MATH 120	College Algebra	3	M, GT-MA1
College Composition	50	ENG 101 & ENG 102	Composition I	6	E, GT-CO1
College Composition Modular	50	ENG 101	Composition I	3	E, GT-CO1
College Mathematic	50	MATH 109	Math Explorations	3	M, GT-MA1
English Literature	50	ENG Electives	ENG Electives	3, 3	GT-AH2
Financial Accounting	50	ACCT 201	Prin of Financial Acctg	3	
French Language, Level I	50	FRN	FRN 101 & FRN 102	6	H
French Language, Level II	59	FRN	FRN 101, FRN 102, FRN 201 & FRN 202	6; 6	H; H, GT-AH4
German Language, Level I	50	GER	GER 101 & GER 102	6	H
German Language, Level II	60	GER	GER 101, GER 102, GER 201 & GER 202	6; 6	H
History of US I: to 1877	50	HIST 201	U.S. History I	3	HS, GT-HI1
History of US II: 1865-Present	50	HIST 202	U.S. History II	3	HS, GT-HI1
Human Growth & Development	50	PSYC 151	Intro Human Develop	3	SS, GT-SS3
Humanities	50	ART	Electives	3, 3	H, GT-AH1
Information Systems	50	CIS	150	3	
Introduction to Business Law	50	BSAD	Elective	3	
Intro to Educational Psychology	50	PSYC	Elective	3	GT-SS3
Introduction to Psychology	50	PSYC 100	General Psychology	3	SS, GT-SS3
Introduction to Sociology	50	SOC 101	Intro to Sociology	3	SS, GT-SS3
Natural Science	50	BIOL	Elective (no Lab credit)	3, 3	ST, GT-SC2
Pre-Calculus	50	MATH 124	Pre-Calculus Math	5	M, GT-MA1
Principles of Macroeconc	50	ECON 201	Prin of Macroeconc	3	SS, GT-SS1
Principles of Microeconomics	50	ECON 202	Prin of Microeconomics	3	SS, GT-SS1
Principles of Managemer	50	MGMT 201	Prin of Managemer	3	
Principles of Marketing	50	MKTG 340	Prin of Marketing	3	
Social Science & History	50	SOC; HIST	Sociology Elective; History Elective	3; 3	SS, GT-HI1; HS, GT-SS1
Spanish Language, Level I	50	SPN	SPN 101 & SPN 102	6	H
Spanish Language, Level II	63	SPN	SPN 101, SPN 102, SPN 201 & SPN 202	6; 6	H; H, GT-AH4
Western Civilization I	50	HIST	HIST Elective	3	HS, GT-HI1
Western Civilization II	50	HIST	HIST Elective	3	HS, GT-HI1

Defense Activity for Non-Traditional Education Support - Equivalency Chart

*See Legend Tab

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

Name of Exam	Acceptable Score	Course Number	Course Equivalent	Credits	Gen Ed Group/GT Pathways
Art of the Western World	400	ART	Elective (Lower Division)	3	H, GT-AH1

Astronomy	400	PHYS 110	Astronomy (without lab)	3	ST, GT-SC2
Business Ethics and Society	400	BSAD 302	Ethics in Business	3	
Business Mathematic	400	NT	Not Transferrabl		
Civil War & Reconstruction	400	HIST	Elective (LowerDivision)	3	GT-HI1
Computer Info Technology	400	CIS 150	Computer Info Systems	3	
Criminal Justice	400	SOC	Elective (Upper Division)	3	
Environmen Science	400	CHEM 125	Environmen Science	3	ST, GT-SC2
Ethics in America	400	PHIL	Elective (Lower Division)	3	H, GT-AH3
Foundations of Education	400	ED 202	Foundation of Education	3	
Fundamentals of College Algebra	400	MATH	Elective (Lower Division)	3	GT-MA1
Fundamentals of Counseling	400	PSYC	Elective (Lower Division)	3	
Fundamentals of Cybersecurity	400	CIS	Elective (Lower Division)	3	
General Anthropolog	400	ANTH	Elective (Lower Division)	3	SS, GT-SS3
Health & Human Development	400	EPER	Elective (Lower Division)	3	SS, GT-SS3
History of the Soviet Union	400	HIST	Elective (LowerDivisi	3	GT-HI1
History of the Vietnam War	400	HIST	Elective (Lower Division)	3	GT-HI1
Human Resource Managemer	400	MGMT 318	Human Resource Mgmt	3	
Human/ Cultural Geography	400	GEOG	Elective (Lower Division)	3	SS, GT-SS2
Introduction to Business	400	BSAD 101	Bus Careers & Opportunitie	3	
Intro to Law Enforcement	400	SOC	Elective (Lower Division)	3	
Intro to World Religions	400	PHIL 120	Elective (Lower Division)	3	H, GT-AH3
Lifespan Developmental Psych	400	PSYC 151	Intro Human Development	3	SS, GT-SS3
Managemer Info Systems	400	CIS 365	Managemer Info Systems	3	
Math for Liberal Arts	400	MATH	Elective (Lower Division)	3	M, GT-MA1
Money & Banking	400	BSAD	Elective (Upper Division)	3	
Organizational Behavior	400	MGMT	Elective (Upper Division)	3	SS, GT-SS3
Personal Finance	400	BSAD	Elective (Lower Division)		
Principles of Advanced English Composition	400	ENG	ENG 101 or elective	3	GT-CO1
Principles of Finance	400	FIN 330	Principles of Finance	3	
Principles of Physical Science I	400	PHYS	Elective (No Lab, Lower Div)	3	ST, GT-SC2
Principles of Public Speaking	400	CID 103	Speaking & Listening	3	H
Principles of Statistics	400	MATH 156	Introduction to Statistics	3	M, GT-MA1
Principles of Supervision	400	BSAD	Elective (Lower Division)	3	
Substance Abuse	400	EPER	Elective (Lower Division)	3	GT-SS3
Technical Writing	400	ENG	115	3	GT-CO2

International Baccalaureate - Equivalency Chart

*See Legend Tab

IB Exam	Score	Course Number	Class Equivalent	Credits	Gen Ed Group/GT Pathways
Anthropology – HL	4-7	ANTH 100; Elective	Cultural Anthropology; Elective	3; 3	SS, GT-SS3; SS
Anthropolog – SL	4-7	ANTH 100	Cultural Anthropolog	3	SS, GT-SS3

Art History – SL	4-7	ART	Elective	3	H, GT-AH1
Astronomy – SL	4-7	PHYS 110 & PHYS 110L	Astronomy & Lab	4	ST, GT-SC1 & GT-SC2
Biology – HL	4-7	BIOL 181 & BIOL 181L; BIOL 182 & BIOL 182L	Coll Biology I/ Organismal Biol & Lab; Coll Biology II/ Cellular Biology & Lab	4; 4	ST, GT-SC1 & GT-SC2; ST, GT-SC1 & GT-SC2
Biology – SL	4-7	BIOL 100 & BIOL 100L	Principles of Biology & Lab	4	ST, GT-SC1 & GT-SC2
Business Management – HL	4-7	MGMT 201; BSAD	Prin of Management; Elective	3; 3	
Business Managemer – SL	4-7	MGMT 201	Prin of Managemer	3	
Chemistry – HL	4-7	CHEM 121 & CHEM 121L; CHEM 122 & CHEM 122L	General Chemistry I & Lab; General Chemistry II & Lab	5; 5	ST, GT-SC1 & GT-SC2
Chemistry – SL	4-7	CHEM 111 & CHEM 111L	Principles of Chemistry & Lab	4	ST, GT-SC1 & GT-SC2
Computer Science – HL	4-7	CIS	Elective	6	
Computer Science - SL	4-7	CIS	Elective	3	
Dance – HL	4-7	EPER	Elective	3	
Dance – SL	4-7	EPER	Elective	3	
Design Technology	No Credit				
Economics – HL	4-7	ECON 201; ECON 202	Prin of Macro Economics; Prin of Micro Economics	3; 3	SS, GT-SS1; SS, GT-SS1
Economics – SL	4-7	ECON	Elective	3	SS, GT-SS1
English A Language & Literature – SL (Native Language)	4-7	ENG 101	Composition I	3	E, GT-CO1
English A Language & Literature – HL (Native Language)	7	ENG 101 & ENG102; ENG 130; Elective	Composition I, Composition II; Intro to Literature; Elective	6; 3; 3	E, GT-CO1; E, GT-CO2; H, GT-AH2
	6	ENG 101 & ENG102; ENG 130	Composition I & Composition II; Intro to Literature	6; 3	E, GT-CO1; E, GT-CO2; H, GT-AH2
	5	ENG 101; ENG 130	Composition I; Intro to Literature	3; 3	E, GT-CO1; H, GT-AH2
	4	ENG 101	Composition I	3	H, GT-CO1
English A Literature – HL Native Language)	7	ENG 130; ENG elective	Introduction to Literature; Elective	3; 9	H, GT-AH2
	6	ENG 130; ENG elective	Introduction to Literature; Elective	3; 6	H, GT-AH2
	5	ENG 130; ENG elective	Introduction to Literature; Elective	3, 3	H, GT-AH2
	4	ENG 130	Introduction to Literature	3	H, GT-AH2
English A Literature – SL (Native Language)	4-7	ENG 130	Introduction to Literature	3	H, GT-AH2
Environmen Systems – SL	4-7	BIOL 121	Environmen Conservatio	3	ST, GT-SC2
Film – HL	4-7	ENG	Elective	6	
Film – SL	4-7	ENG	Elective	3	
World Language A1 – HL (Native Language)	4-7	FRN, GER, ITL, SPN	Upper Division World Language; Elective	6	
World Language A1 – SL (Native Language)	No Credit				

World Language B – HL (Non-Native Language)	6-7	FRN 101, FRN 102, FRN 201, FRN 202, FRN 303, GER 101, GER 102, GER 201, GER 202, GER 303, ITL 101, ITL 102, ITL 201, ITL 202, ITL 303, SPN 101, SPN 102, SPN 201, SPN 202, SPN 303	Beginning I, II, Intermediate I, II & Conversation & Composition	6; 6; 3	H; H
	5	FRN 101, FRN 102, FRN 201, FRN 202, GER 101, GER 102, GER 201, GER 202, ITL 101, ITL 102, ITL 201, ITL 202, SPN 101, SPN 102, SPN 201, SPN 202	Beginning I, II, Intermediate I & II	6; 6	H; H
	4	FRN 101, FRN 102, FRN 201, GER 101, GER 102, GER 201, ITL 101, ITL 102, ITL 201, SPN 101, SPN 102, SPN 201	Beginning I, II, & Intermediate I	6; 3	H; H
World Language B – SL (Non-Native Language)	4-7	FRN 101, FRN 102, GER 101, GER 102, ITL 101, ITL 102, SPN 101, SPN 102	Beginning I, II	6	H
World Language AB – SL (Non-Native Language)	4-7	WL 101; WL 102	Intro Critical World Language I; Intro Critical World Language II	3; 3	
Geography – HL	4-7	GEOG 101; GEOG 103	Physical Geography; World Regional Geography	3; 3	SS, GT-SS2
Geography – SL	4-7	GEOG 103	World Regional Geography	3	SS, GT-SS2
Global Politics - HL	4-7	POLS 201	International Relations	3	SS, GT-SS1
Global Politics - SL	4-7	POLS 201	International Relations	3	SS, GT-SS1
20th Century World History & History of Africa – HL	4-7	HIST	Elective	6	HS
20th Century World History & History of the Americas – HL	4-7	HIST 201 & HIST 202	U. S. History I & II	6	HS, GT-HI1
20th Century World History & History of Asia/OCE – HL	4-7	HIST	History General Education	6	HS, GT-HI1
20th Century World History & History of Europe/ M.E. – HL	4-7	HIST 111; HIST	World History since 1500; Elective	3; 3	HS, GT-HI1
20th Century World History – SL	4-7	HIST 111	World History since 1500	3	HS, GT-HI1
History of Europe and the Islamic World – HL	4-7	HIST	History General Education	6	HS, GT-HI1

History of Europe and the Islamic World – SL	4-7	HIST	Elective	6	HS
Information Technology – SL	4-7	CIS	Elective	3	
Latin – Higher or SL	4-7	WL 101	Intro to a Critical Wrld Language I	3	H
Mathematics Applications & Interpretation – SL	4-7	MATH 109	Mathematical Explorations	3	M, GT-MA1
Mathematics Applications & Interpretation – HL	4-7	MATH 109; MATH 156	Mathematical Explorations; Intro to Statistics	3; 3	M, GT-MA1
Mathematics Analysis & Approaches – SL	4-7	MATH 120	College Algebra	3	M, GT-MA1
Mathematics Analysis & Approaches – HL	4-6	MATH 120; MATH 124	College Algebra; Pre-Calculus	3; 5	M, GT-MA1
Mathematics Analysis & Approaches - HL	7	MATH 120; MATH 124, MATH 126	College Algebra; Pre-Calculus, Calculus & Analytical Geometry I	3; 5; 5	M, GT-MA1
Music – HL	4-7	MUS 118; MUS 150	Music Appreciation; Music Theory I	3; 3	H, GT-AH1
Music – SL	4-7	MUS 118	Music Appreciation	3	H, GT-AH1
Music Creation – SL	4-7	MUS 118	Music Appreciation	3	H, GT-AH1
Music Performance – SL	4-7	MUS 118	Music Appreciation	3	H, GT-AH1
Philosophy – HL	4-7	PHIL 102; Elective	Philosophical Literature; Elective	3; 3	H, GT-AH3
Philosophy – SL	4-7	PHIL 102	Philosophical Literature	3	H, GT-AH3
Physics – HL	4-7	PHYS 201 & PHYS 201L; PHYS 202 & PHYS 202L	Principles of Physics I & Lab; Principles of Physics II & Lab	4; 4	ST, GT-SC1 & GT-SC2
Physics – SL	4-7	PHYS 140 & PHYS 140L	Light, Energy, and the Atom & Lab	4	ST, GT-SC1 & GT-SC2
Psychology – HL	4-7	PSYC 100; Elective	General Psychology; Elective	3; 3	SS; GT-SS3 SS
Psychology – SL	4-7	PSYC 100	General Psychology	3	SS, GT-SS3
Sports, Exercise & Health - HL	4-7	EPER	Elective	3	
Sports, Exercise & Health - SL	4-7	EPER	Elective	3	
Theatre – HL	4-7	Humanities	General Education Humanities; Elective	6	H, GT-AH1
Theatre – SL	4-7	Humanities	General Education Humanities; Elective	3	H, GT-AH1
Visual Arts – HL	4	ART 100	Visual Dynamics	3	H, GT-AH1
	5-7	ART 100; Elective	Visual Dynamics; Elective	3; 3	H, GT-AH1
Visual Arts – SL	4-7	ART 100	Visual Dynamics	3	H, GT-AH1
World Religions – SL	4-7	PHIL 120	Islam and Non-Western Religions	3	H, GT-AH3

Legend Guide

General Education Category (Gen Ed Group)

- E English
- H Humanities
- HS History
- M Math
- SS Social Science
- ST Science & Technology

Colorado Guaranteed Transfer Pathways (gtPathways)

- GT-AH Arts & Humanities
- GT-CO Composition
- GT-HI History
- GT-MA Mathematics
- GT-SC Science
- GT-SS Social Sciences

Experiential Education

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.

Designated Experiential Education Courses

CSU Pueblo adopted Experiential Education as the focus of its 2017 Higher Learning Commission Quality Initiative (HLC QI) and engaged in a number of efforts toward promoting the pedagogy of experiential education campus-wide beginning 2013.

As a result of the QI, CSU Pueblo began recognizing and designating courses with significant experiential education (EE) components. The EE designation may be extended to courses on a permanent, semester-by-semester, or section-by-section basis. EE designated courses include:

1. At least 10 hours of experiential education course work per credit hour earned
2. Discussion of the definition, principles, and purpose of the Experiential Learning Cycle
3. Course objectives and learning outcomes tied to direct experience
4. Structured reflection
5. Activities aligned with experiential education principles
6. Assessment of student learning and effectiveness of the experience

Students in EE designated courses:

1. Conceptualize course material and engage theory with practice through posing questions, solving problems, and constructing meaning,
2. Are encouraged to engage in experimentation, and
3. Demonstrate evidence of knowledge constructed through experiential learning (i.e., portfolios, presentations, projects, performances, displays, etc.).

The Association of Experiential Education (AEE) definition and principles of EE inform the practice at CSU Pueblo. The following is from http://www.aee.org/what-is-ee (http://www.aee.org/what-is-ee/), with modifications approved by the CSU Pueblo EE Roundtable, September 2015:

Experiential education is a philosophy that informs many methodologies in which educators purposefully engage with learners both in what John Dewey refers to as direct experience and in focused reflection in order to increase knowledge, develop skills, clarify values, and develop people's capacity to contribute to their communities.

Experiential learning theory defines learning as "the process whereby knowledge is created through the transformation of experience". Kolb's (1984) Experiential Learning Cycle depicts the learning process as including four adaptive learning modes: concrete experience (CE), reflective observation (RO), abstract conceptualization (AC), and active experimentation (AE). Concrete experiences are the basis for the learners' reflections. The reflections are then assimilated into abstract concepts to be utilized in future contexts. These abstract concepts are then tested actively and serve to inform the learner when he or she is exposed to new experiences. This process is cyclical in nature where learners are exposed to each of the learning modes – experiencing, reflecting, thinking, and acting – in a recursive process that is dependent on the unique experiences and elements to be learned. Knowledge results from the combination of grasping and transforming experience.

The principles of experiential education practice are:

- Experiential learning occurs when carefully chosen experiences are supported by reflection, critical analysis and synthesis.
- Experiences are structured to require the learner to take initiative, make decisions and be accountable for results.
- Throughout the experiential learning process, the learner is actively engaged in posing questions, investigating, experimenting, being curious, solving problems, assuming responsibility, being creative, and constructing meaning.
- Learners are engaged intellectually, emotionally, socially, and/or physically.
- The results of the learning are personal and form the basis for future experience and learning.
- Relationships are developed and nurtured: learner to self, learner to others and learner to the world at large.
- The educator and learner may experience success, failure, adventure, risk-taking and uncertainty, because the outcomes of experience cannot totally be predicted.
- Opportunities are nurtured for learners and educators to explore and examine their own values.
- The educator's primary roles include setting suitable experiences, posing problems, setting boundaries, supporting learners, insuring physical and emotional safety, and facilitating the learning process.
- The educator recognizes and encourages spontaneous opportunities for learning.
- Educators strive to be aware of their biases, judgments and pre-conceptions, and how these influence the learner.

FERPA

A student's rights regarding their Education Records include:

The right to inspect and review the student's Education Records within 45 days of the day the student's Institution receives a request for access.

The right to request amendment of the student's Education Records that the student believes are inaccurate or misleading and to place within the Education Record a statement about the contents of the record. If the Institution decides not to amend the records as requested, the student shall be notified of this decision and advised of the right to a hearing. Additional information about the hearing procedures shall accompany the notification.

The right to limit disclosure of information contained in the student's Education Records, except to the extent that FERPA authorizes disclosure without consent, and the right to consent to disclosures that are not otherwise authorized by law or by this policy.

The right to file a complaint with the U.S. Department of Education concerning alleged failures by the Institution to comply with the requirements of FERPA. The name and address of the office that administers FERPA is: Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Ave. SW, Washington, DC 20202-4605.

Directory information includes, but is not limited to,

- Student's name
- Address
- Telephone listing
- Electronic mail address
- Photograph
- Date & place of birth
- Major field of study
- Grade level
- Enrollment status (e.g., undergraduate or graduate, full-time or part-time)
- Dates of attendance
- Participation in officially recognized activities & sports
- Weight and height of members of athletic teams
- Degrees, honors, and awards received
- The most recent educational agency or institution attended
- Potential graduation date

A student's responsibilities include:

- The responsibility to read the Student Record Privacy Statement and Annual Notification published by the Offices of the Institution Registrars.
- The responsibility to manage any restrictions on the disclosure of Directory Information, so that these restrictions do not interfere with the student's work or academic life by preventing disclosures intended for his or her benefit.
- The responsibility to manage any consent that the student has given for disclosures to be made to any other person, and to withdraw such consent, in writing or via a Student Online Portal when the student no longer wishes to permit such disclosures. Written withdrawal of consent must be submitted to the office where the written consent form was filed.

Disclosure of Education Records

The following procedures apply to the disclosure of information from a student's Education Record. Additional procedures and forms may be established by the Office of the Registrar.

Directory Information

Directory Information may be disclosed without notice or consent; however, students have the right to request that their Directory Information be kept confidential, in which case, the Institution shall not disclose that information without consent, or as authorized by law. However, students should be aware that restricting the release of Directory Information or placing a full confidential hold on their account may have unintended consequences. For example, such restriction may make it difficult for potential employers or other schools to verify enrollment, a student's name may be excluded from the commencement program, and student organizations, fellow students and others may have difficulty locating the student through the institutional directory. Except as specifically required by law or by an approved Institutional contract, the Institution shall neither create nor distribute aggregate lists or compilations of Directory Information elements such as students' email addresses, or students' mailing addresses except as necessary for official business purposes, as approved by the Registrar or Dean of Students at the Institution.

Education Records

Education Records may be disclosed to a person or party internal or external to the Institution, without the student's consent, as authorized under the FERPA regulations, 34 C.F.R. §99.31, including (but not limited to):

- To School Officials who have a Legitimate Educational Interest.
- When required pursuant to a subpoena or other court order.
- When the disclosure is to the student's Parent, and the conditions for disclosures to Parents are met as set forth below.
- When the disclosure is required by law. In particular, federal law requires that the Institution disclose the "final results" of any disciplinary proceeding dealing with an alleged crime of violence or an alleged non-forcible sex offense to the alleged victim of the offense (or the alleged victim's next of kin, or to any person whom the Institution determines to have a legitimate interest in such information). As used herein, "final results" that may be disclosed after all hearings and determinations are final under the Institution's rules and policies, are: the student's name; the violation committed under the Institution's Student Conduct Code; and any sanction imposed by the Institution against the student.
- When the Institution determines that there is a health or safety emergency that warrants such disclosure. A health or safety emergency exists whenever there is an articulable and significant threat to the health or safety of the student or another person.
- When the disclosure is to officials of another institution of higher education where the student is enrolled, or is seeking to enroll, for purposes related to that enrollment.
- Where there is a legitimate business or research need for such disclosure to a third party, and the disclosure is controlled by the Institution with provisions for data to be securely transmitted, stored, and accessed. Access must be limited by contract so as to preserve an individual's privacy, with strictures to enforce data retention and disposal and extension of FERPA obligations to the third party. All other requests for Education Records to be shared with external entities for the purposes of research shall be formally approved by the Institutional Review Board (IRB).
- For financial aid purposes.
- Any other exception provided under FERPA applies.

Disclosures to Parents & Trusted Designees

According to FERPA, the Institution may but is not required to disclose any part of the student's Education Record to a student's Parents. The Institution primarily provides Parents and Trusted Designees with access to limited information through Online Portals for Trusted Third Parties or with written student consent. In those instances where a Parent or any individual or entity requests Education Records that are not available via Online Portals for Trusted Third Parties or the student has not provided written consent, the request should be referred to the Dean of Students at CSU-Fort Collins, and the Registrar's Offices at CSU-Pueblo and CSU-Global for additional review and response. A qualified Parent or Trusted Designee is granted access to the student's Education Record when any of the following conditions are met:

- A Parent of the student has claimed the student as a dependent on the Parent's federal tax return and the Parent's identity has been verified by the Office of the Registrar, the Office of Financial Aid, Business and Financial Services, or another authorized School Official. If one Parent has claimed the student as a dependent, another Parent of the student may also be allowed to receive such

disclosures. The "Parent Affidavit and Request for Student Academic Information" form or a copy of the tax return in the Office of Financial Aid can serve as verification the Parent claimed the student on the federal tax return.

- The student has authorized the disclosure in writing by providing the Institution with a signed permission to release academic records.
- The student has authorized the disclosure in writing or consented to access via a Student or Online Portal for Trusted Designees. The Trusted Designee may view defined areas of the student record. Discussions with Institutional officials of details of the student record require a signed FERPA disclosure.
- There is a health or safety emergency which, in the discretion of the Institution, warrants disclosing the information.
- The student is under the age of 21, and the information relates to a violation of law or policy involving the use or possession of drugs or alcohol. It is an Institution's policy to notify a student's Parents in these circumstances in order to help reduce alcohol and drug use by students, engage Parents in dialogue about their student's behavior related to alcohol/drugs, and assist students and the community in understanding that the Institutions take underage alcohol/drug use seriously; or
- The information relates to a law enforcement matter and is contained in a record made by a law enforcement authority, including, but not limited to, campus police.

Disclosures Between Institutions

An Institution may disclose Education Records of a student to School Officials of another Institution, or to the CSU system office, whenever there is a Legitimate Educational Interest in doing so. Examples include, but are not limited to:

- When a student seeks to earn credit at another Institution or transfer credits between the Institutions.
- When a student wishes to attend another Institution and have their application materials transferred.
- When the system office and/or the Institutions are working together to create, maintain, process or report information for accreditation, compliance, or business purposes, including enhancing student success.

Information Other Than Education Records

FERPA neither requires nor prohibits a faculty member or other School Official from sharing concerns or observations with a Parent about their student based on personal knowledge or observation rather than on the Education Record. If the information is contained in any written Education Record (other than a Sole Source Note), he or she must first confirm that the appropriate written consent form for the disclosure (discussed below in Section 6) has been received.

How to Provide Consent to a Disclosure

A student may consent to the release of any or all of his or her Education Record by completing a written consent form and returning it to the Office of the Registrar or other responsible School Official. Consent may be ongoing or may be given for a specified period of time or limited to a single instance. Forms are available from the Registrar's office at the Institution. Financial information consent forms are available in Student Online Portals and must be submitted to Accounts Receivable Operations. Students are also afforded the opportunity to consent to the release of certain Education Records to be viewed by any individual without the necessity of giving consent each time the disclosure is requested. This is done by registering the email address of the Trusted Designee to whom the disclosures will be made in the Student Online Portal and therein designating the information to be disclosed. The types of information that may be designated for disclosure are limited and do not mean School Officials may speak to the Parent or Trusted Individual about the Education Record. Consent to release information not accessible through the Student Portal requires a separate, written release form signed by the student.

Financial Aid Information

Information from a student's application for need-based financial aid (including Parental income) and the status of that application will be released only to a Parent whose income information is included on the application (e.g., the Free Application for Federal Financial Aid, or FAFSA, application form).

Medical Treatment Records

Medical treatment records are not Education Records under FERPA so long as they are shared for treatment purposes only. If an Institution keeps or maintains a medical treatment record that is disclosed by the student for purposes other than medical treatment, the medical record is then considered an Education Record subject to FERPA. Further disclosures must be limited to only such portions of the medical record that are relevant and necessary to the matter for which disclosure is authorized.

Responsibilities of Faculty & Staff

Faculty, staff, and agents of the Institutions who have access to student Education Records are responsible for:

- Understanding the requirements of FERPA and this policy.
- Understanding, observing, and reaffirming statements of acceptable use in accessing Institutional administrative systems and student Education Records.
- Protecting the confidentiality of student Education Records as required by this Policy.
- Accessing student Education Records only when they have a Legitimate Educational Interest for doing so.
- Authenticating the identity of those requesting student Education Record information and confirm their right to access prior to release of information. For assistance with authentication procedures, Institutional employees should contact their Office of the Registrar.

All Institutions' employees and units with access to Education Records shall take all reasonable measures to assure the security and confidentiality of such records.

Special Responsibilities of the Office of the Registrar

Institutional registrars are responsible for disseminating the Student Record Privacy Statement and Annual Notification under FERPA, for obtaining written consent and authorization to release a student's records, and for facilitating authorized disclosures.

Institutional registrars shall inform parties to whom Education Records are released that recipients are not permitted to disclose the information to others without the written consent of the student (unless the disclosure is required or permitted by law without the student's consent).

Institutional registrars shall periodically review FERPA policies and procedures with the assistance of the Office of the General Counsel and the Office of Policy & Compliance at CSU-Fort Collins.

Concerns, complaints, questions or suggestions regarding the release of student records should be addressed to their Office of the Registrar

Freedom of Expression

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 respecting diverse viewpoints. 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 and University policy. 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.

Any members of the campus community (students, faculty, or staff) who feel that they have been treated unfairly because of their views or indelible traits should contact the Director of the Office of Institutional Equity, or the Office of Student Conduct.

General Education

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.

As part of our Vision 2028 initiative, graduates of Colorado State University Pueblo will be exposed to our Guiding Principles through the General Education Curriculum. These guiding principles will be anchored through active involvement with diverse communities and real-world challenges. General Education courses will self-select one or multiple principles as part of their content.

- **Engagement of Place**: Courses embrace our regional histories, diverse cultures, socioeconomic realities, and physical location
- **Live Sustainably**: Courses emphasize sustainability both regionally and globally
- **Cultivate Entrepreneurship:** Courses focus on educational, economic, cultural, and global innovation
- **Build Knowledge**: Courses advance research and scholarship that serves the public good
- **Impact Society**: Courses highlight our commitment to the health and well-being of our people and our communities

To help students achieve these goals, the skills component of the CSU Pueblo general education program is designed to give students the written communication and quantitative reasoning skills necessary for success in their undergraduate studies and future careers. The knowledge component is designed to give students direct experience in the methods of thought and inquiry in three central areas of academic endeavor: the arts and humanities; the social sciences; and the natural and physical sciences. Through study in the sciences, mathematics, social sciences, humanities, histories, languages, and the arts students will engage with big questions, both contemporary and enduring.

Upon completion of general education courses, students will have intellectual and practical skills. These skills will be practiced extensively across the general education curriculum and include:

- **Written Communication:** Develop and express ideas in writing, learning to work in many genres and styles, and with many different writing technologies, and mixing texts, data, and images.
- **Quantitative Reasoning:** Apply numeric, symbolic and geometric skills to formulate and solve quantitative problems.
- **Inquiry & Analysis:** Explore issues, objects or works through the collection and analysis of evidence that results in informed conclusions or judgments and break complex topics or issues into parts to gain a better understanding of them.
- **Oral communication:** Prepare purposeful presentations designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.
- **Critical Thinking:** Comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.
- **Creative Thinking:** Combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking.
- **Information Literacy:** Know when there is a need for information, to be able to identify, locate, evaluate, and effectively and responsibly use and share that information for the problem at hand.
- **Technical literacy:** Use, manage, understand, and assess technology.
- **Problem solving:** Design, evaluate and implement a strategy to answer an open-ended question or achieve a desired goal ().
- **Teamwork:** Belong to teams where effort, manner of interacting with others, and the quantity and quality of contributions are valued.

The Colorado guaranteed transfer program (gtPathways) is a set of general education courses that the state guarantees to transfer. Certain courses taken at Colorado public colleges and universities are guaranteed to transfer among all two- and four-year public institutions in the state. Up to 31 credit hours of successfully completed (C- or better) courses in general education will count toward general education or graduation requirements. These courses are not based on equivalencies but meet specific content and competency criteria. Additional information about gtPathways is available at C (https://cdhe.colorado.gov/guaranteed-transfer-gt-pathways-general-education-curriculum-0/)DHE website (https://cdhe.colorado.gov/guaranteed-transfer-gt-pathways-general-education-curriculum-0/). The gtPathways courses offered at CSU Pueblo are identified in the skills and knowledge components below. They are listed according to their appropriate

gtPathways code, which is common among all gtPathways courses in Colorado.

The general education requirement for graduation with a BA or BS degree includes a total of 35 semester credits in two categories:

Skills Component: 9 credits
Knowledge Component: 26 credits
TOTAL: 35 credits

Skills Component

Candidates for the baccalaureate BA or BS 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.)

Candidate for the Bachelor of Applied Science (BAS) degree must complete one course each in skills component area (6 credits). Skills and knowledge component outcomes are further met through the specific course requirements of their program.

To complete the Skills component, students must successfully complete courses in the following content areas with a minimum overall GPA of 2.000 in courses taken at CSU Pueblo. Transfer courses are not computed within this GPA:

Written Communication (2 courses; 1 from each area): 6 credits
Quantitative Reasoning (1 course): 3 credits
TOTAL: 9 credits

A. Written Communication

Take one from **each** of the following categories:

Course	Title	Credits
GT-CO1 (Introductory Writing Course)		
ENG 101	Rhetoric & Writing I (GT-CO1)	3
GT-CO2 (Intermediate Writing Course)		
ENG 102	Rhetoric & Writing II (GT-CO2)	3
ENG 115	Intro Tech Prof Writing GT-CO2	3
ENG 117	Intro. Scientific/Medical Writing (GT-CO2)	3

B. Quantitative Reasoning

Take **one** of the following courses:

Course	Title	Credits
GT-MA1 (Mathematics)		
MATH 101	Introductory College Mathematics (GT-MA1)	3
MATH 109	Mathematical Explorations (GT-MA1)	3
MATH 120	College Algebra (GT-MA1)	3
MATH 124	Pre-Calculus (GT-MA1)	5
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 156	Introduction to Statistics (GT-MA1)	3
MATH 221	Applied Calc: An Intuitive Approach (GT-MA1)	4
Or any MATH course that includes one of these as a prerequisite [1]		

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

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): 8 credits
TOTAL: 26 credits

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

Students in a Bachelor of Applied Science (BAS) program fulfill general education knowledge component outcomes through the specific course requirements of their program.

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

A. Humanities

Course	Title	Credits
GT-AH1 (Arts and Expression)		
ARH 211	Global Art I (GT-AH1) CC	3
ARH 212	Global Art II (GT-AH1) CC	3
ART 100	Visual Dynamics (GT-AH1) CC	3
ENG 114	Introduction to Creative Writing (GT-AH1) CC	3
MUS 118	Music Appreciation (GT-AH1) CC	3
SPN 130	Intro to Spanish-Speaking Cultures CC	3
GT-AH2 (Literature and Humanities)		
ENG 130	Introduction to Literature (GT-AH2)	3
ENG/CS 220	Survey of Chicano Literature (GT-AH2) CC	3
ENG 221	Masterpieces of Literature I (GT-AH2)	3
ENG 222	Masterpieces of Literature II (GT-AH2)	3
ENG 240	Multi-Ethnic American Literature (GT-AH2) CC	3
GT-AH3 (Ways of Thinking)		
PHIL 102	Philosophical Literature (GT-AH3)	3
PHIL 107	Intro to Religious Studies (GT-AH3) CC	3
PHIL 120	Islam and Non-Western Religions (GT-AH3) CC	3
PHIL 201	Classics in Ethics (GT-AH3)	3
PHIL 204	Critical Reasoning (GT-AH3)	3
PHIL 205	Deductive Logic (GT-AH3)	3
GT-AH4 (World Languages) [1]		
FRN 201	Intermediate French I (GT-AH4) CC	3
FRN 202	Intermediate French II (GT-AH4) CC	3
GER 201	Intermediate German I CC	3
GER 202	Intermediate German II CC	3
ITL 201	Intermediate Italian I (GT-AH4) CC	3
ITL 202	Intermediate Italian II (GT-AH4) CC	3

SPN 201	Intermediate Spanish I (GT-AH4) [CC]	3
SPN 202	Intermediate Spanish II (GT-AH4) [CC]	3

[1] Must be Intermediate/200 Level.

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

Course	Title	Credits
WL 100	Intro to Comparative Linguistics [CC]	3
CID 103	Speaking & Listening	3
ASL 101	Beginning American Sign Language I [CC]	3
ASL 102	Beginning American Sign Language II [CC]	3
ASL 201	Intermediate American Sign Language I [CC]	3
ASL 202	Intermediate American Sign Language II [CC]	3
FRN 101	Beginning French I [CC]	3
FRN 102	Beginning French II [CC]	3
GER 101	Beginning German I [CC]	3
GER 102	Beginning German II [CC]	3
ITL 101	Beginning Italian I [CC]	3
ITL 102	Beginning Italian II [CC]	3
SPN 101	Beginning Spanish I [CC]	3
SPN 102	Beginning Spanish II [CC]	3

B. History

Course	Title	Credits
GT-HI1 (History)		
CS 101	Introduction to Chicano Studies (GT-HI1) [CC]	3
HIST 110	World History to 1500 (GT-HI1) [CC]	3
HIST 111	World History since 1500 (GT-HI1) [CC]	3
HIST/CS 136	The Southwest United States (GT-HI1) [CC]	3
HIST 201	U.S. History I (GT-HI1)	3
HIST 202	U.S. History II (GT-HI1)	3

C. Social Sciences

Course	Title	Credits
GT-SS1 (Economic or Political Systems)		
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	3
POLS 101	American Government (GT-SS1)	3
POLS 102	State & Local Government [CC]	3
POLS 201	International Relations (GT-SS1) [CC]	3
POLS 202	Comparative Politics	3
SOC 201	Social Problems (GT-SS1)	3
SW 205	Social Welfare in the United States (GT-SS1)	3
GT-SS2 (Geography)		
GEOG 103	World Regional Geography (GT-SS2) [CC]	3
GT-SS3 (Human Behavior, Culture, or Social Frameworks)		
ANTH 100	Cultural Anthropology (GT-SS3) [CC]	3
CS/SW 230	Chicano: Social & Psychological Study (GT-SS3) [CC]	3
MAE 101	Media & Society (GT-SS3)	3
PSYC 100	General Psychology (GT-SS3)	3
PSYC 151	Human Development (GT-SS3)	3
PSYC 222	Understanding Animal Behavior (GT-SS3)	3
SOC 101	Introduction to Sociology (GT-SS3)	3

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

Course	Title	Credits
ANTH 106	Language, Thought and Culture [CC]	3
POLS 202	Comparative Politics [CC]	3
PSYC 231	Marriage & Family Relationships	3
PSYC 251	Childhood and Adolescence	3
SCSC 209	African American Studies [CC]	3
WS 100	Introduction to Women's Studies [CC]	3

D. Natural and Physical Sciences

Course	Title	Credits
GT-SC2 Lecture and GT-SC1 Required Laboratory		
BIOL 100 & 100L	Principles of Biology (GT-SC2) and Principles of Biology Lab (GT-SC1)	4
BIOL 121 & 121L	Environmental Conservation (GT-SC2) and Environmental Conservation Lab (GT-SC1)	4
BIOL 181 & 181L	College Biology I/Organismal Bio (GT-SC2) and College Biology I/Organismal Bio Lab (GT-SC1)	4
BIOL 182 & 182L	College Biology II/Cellular Biology (GT-SC2) and College Biology II/Cellular Bio Lab (GT-SC1)	4
BIOL 201 & 201L	Botany (GT-SC2) and Botany Laboratory (GT-SC1)	4
BIOL 223 & 223L	Human Physiology and Anatomy I (GT-SC2) and Human Physiology and Anatomy I Lab (GT-SC1)	4
BIOL 224 & 224L	Human Physiology and Anatomy II (GT-SC2) and Human Physiology and Anatomy II Lab (GT-SC1)	4
CHEM 101 & 101L	Chemistry and Society (GT-SC2) and Chemistry and Society Lab (GT-SC1)	4
CHEM 111 & 111L	Principles of Chemistry (GT-SC2) and Principles of Chemistry Lab (GT-SC1)	4
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
CHEM 125 & 125L	Environmental Science (GT-SC2) and Environmental Science Laboratory (GT-SC1)	4
CHEM 160 & 160L	Introduction to Forensic Science (GT-SC2) and Intro to Forensic Science Lab (GT-SC1)	4
GEOL 101 & 101L	Earth Science (GT-SC2) and Earth Science Lab (GT-SC1)	4
GEOL 114 & 114L	Oceanography and Oceanography Lab	4
PHYS 110 & 110L	Astronomy (GT-SC2) and Astronomy Lab (GT-SC1)	4
PHYS 140 & 140L	Light, Energy, & the Atom (GT-SC2) and Light, Energy and the Atom Lab (GT-SC1)	4

PHYS 201 & 201L	Principles of Physics I (GT-SC2) and Principles of Physics Lab I (GT-SC1)	4
PHYS 202 & 202L	Principles Of Physics II (GT-SC2) and Principles Of Physics II Lab (GT-SC1)	4
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5

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

Course	Title	Credits
ANTH 101 & 101L	Biological Anthropology and Biological Anthropology Lab	4
BIOL 202 & 202L	Zoology and Zoology Laboratory	4
EPER 162 & 162L	Personal Health and Personal Health Lab	4

Grades & Grading System

The quality of a student's work is appraised according to letter grades and grade point averages. 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 Points

Grade	Description	per Credit
A+		4.00
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)	See Note[1]
U	(Unsatisfactory)	See Note[2]
AD	(Academic Dishonesty)	See Note[2]
AU	(No Credit—Audit)	See Note[2]
I	(Incomplete)	See Note[2]
IP	(In Progress)	See Note[1]
NG	(No Grade Reported)	See Note[2]
R	(Repeat)	See Note[2]
RQ	(Basic Requirement)	See Note[1]
TP	Credit by Exam, Credit for Prior Learning, or Escrow Credit	See Note[1]
W	(Withdrawal)	See Note[2]
WN	(Administrative Withdrawal or Nonpayment)	See Note[2]
X	(Academic Fresh Start)	See Note[1]

[1] Credits not used to compute the grade-point average but counted toward graduation, excluding remedial courses.
[2] 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.

I: The temporary grade of I (incomplete) is recorded at the end of the term when a student is granted an extension of time to complete course work. It is given solely at the discretion of the instructor, when course requirements cannot be completed for reasons beyond the student's control. The student must be receiving a passing grade at the time an I (incomplete) agreement is made, which may be no earlier than the end of the withdrawal period. The I (incomplete) 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 I (incomplete) 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 I (incomplete) 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 in the same course is not allowed while the I (incomplete) is still outstanding. Adjunct faculty are not allowed to award grades of I without approval from the Department Chair. All incomplete (I) grades need to be resolved to a final letter grade for the student to be eligible for degree conferral.

NG: The temporary grade of NG (No Grade Reported) is recorded in place of a blank/missing grade at the end of the term and disqualifies students for the Dean's List. All NG grades need to be resolved to a final letter grade for the student to be eligible for degree conferral.

R: A grade preceded with an R designation indicates that the course has been repeated.

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.

X: A grade preceded with an X designation indicates Academic Fresh Start and therefore will be excluded from all GPA calculations.

***:** A grade a * designation indicates that the credits have been excluded from Total Hours.

Awarding of Grades

Grades are earned by students and awarded by faculty.

Grade Changes

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

Grade-Point Average Computation

Earned grade points are computed by multiplying the point value of grades earned by the number of credit hours of the course(s) in which the student was enrolled.[1] A student's term GPA is calculated by dividing total grade points by total credit hours attempted. A student's cumulative GPA is calculated by dividing total grade points earned by total credit hours attempted. Some grades are not computed in the grade-point average (see The Grading System for reference). **For purposes of computing a student's grade-point average only CSU Pueblo hours are used.**

[1] And rounding to three digits past the decimal.

Dean's List

All undergraduate students, including those enrolled in Extended Studies classes and those enrolled in a second baccalaureate degree program, are eligible for the Deans' List in a given semester provided they:

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

The Deans' List is generated and published fall and spring semesters, at the time that grades are due for the semester, by the Provost's Office, excluding summer.

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 misconduct.
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 from the beginning 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 30 working days from the beginning of the following fall semester. All documents submitted will become part of the student's academic file for their review.

The Academic Appeals Board will review the written appeal and response of the instructor(s). When needing further clarification, 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 Registrar's Office.

Immunization Requirement

Colorado Law 6CCR 1009-2 requires all college students born since January 1, 1957 to be immunized against measles, mumps and rubella (MMR)

Proof of Immunity consists of:

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

Medical or Non-medical Exemption:

- Medical or Non-medical exemptions are available. The medical and non-medical exemption statement, must be completed on the waiver certificate by a physician, nurse practitioner, physician's assistant, student or a parent if the student is under the age of 18. In the event of an outbreak of measles, mumps or rubella, exempted students may be subject to exclusion from school and quarantine.

Student vaccine requirements are subject to change and will be reflected on the immunization information page of our Wolfpack Wellness Center: https://www.csupueblo.edu/student-health-services/immunization-and-screening.html

MMR immunization, proof of immunity or medical/non-medical waiver must be filled out on the Wolfpack Wellness Center web portal at www.csupueblo.studenthealthportal.com. Documents may also be uploaded on the web portal. To access the web portal, the student will use their pack email user name and password.

For any questions, please contact the Wolfpack Wellness Center at 719 549-2830.

Prior Learning

Prior learning assessment includes a variety of types of learning obtained outside the classroom. Credit earned by prior learning assessment is not counted as hours in residence.

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.

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 Registrar's Office.

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).

College Level Examination Program & DANTES

Credit earned by the student on selected CLEP 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 Registrar's Office 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).

Credit by Examination (In-House General Education & Subject Area Exams)

All courses satisfying general education requirements have a test-out procedure. Students wishing to test out of a course should contact the chair of the department offering the course.

Departmental faculty shall identify any additional undergraduate courses for which students may earn credit by examination. The non-refundable fee for this process is $75 per course. Application forms for credit by examination are available from the Registrar's Office.

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 and will be posted at the end of the term it is approved. (Unsuccessful attempts are not recorded on the transcript.) The credit hours earned by examination do NOT count in the student's load for the term or in the calculation of the student's grade point average.

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 C- 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.

Undergraduate Credit for Prior Learning

Prior learning is experienced-based learning that has been attained outside of accredited post-secondary education systems. Credit for Prior Learning (CPL) includes learning acquired from work and life experiences. It is awarded for college-level learning involving knowledge, skills, and competencies that students have obtained which is equivalent to CSU Pueblo course learning outcomes. CPL may apply towards a degree or certificate but does not fulfill the university residency requirement.

CSU Pueblo students may seek undergraduate academic credit for prior learning by first contacting the Adult & Prior Learning Assessment Office. Information about the applicability of prior learning within a specific discipline and assistance with the requirements and process for obtaining prior learning credit will be provided "A portfolio demonstrating completion of the learning outcomes and objectives of the specific course(s) in a single prefix will usually be required by the appropriate academic department chair to apply for this credit. The submitted portfolio will be assessed by the chair for applicability to obtaining credit for the course(s) up to six credit hours to which the portfolio applies. A separate portfolio must be submitted for each prefix to be evaluated, and a fee of $75 will be assessed per portfolio submitted. This fee is non-refundable even if credit is not awarded. Portfolios approved by the academic department chair must be turned into the Registrar's Office by the last day of classes for the appropriate term to have the prior learning credit posted. Credits earned through CPL will be posted at the end of the term. Please see the academic calendar for dates.

Colorado State University Pueblo has industry agreements for specific certifications which may incur a different fee structure.

Escrow Credit

Escrow credit is a block of academic credit for previous learning or experience that does not directly transfer course-for-course.

Escrow credit is only available in specific programs. The number of credits applied (maximum of 33 credits) is determined by the program director, as defined in each program, and based upon previous coursework, certificate or licensure, and work/field experience. These credits are held in escrow and recorded when the student successfully completes all other requirements of the bachelor's program. Approved credits will be posted at the end of the term in which they were approved.

Escrow credits are exempt from the residency requirement for 30 of the last 60 semester hours to be completed at CSU Pueblo.

International Baccalaureate Diploma Program

Colorado State University Pueblo recognizes and encourages high school students to participate in the International Baccalaureate (IB) 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 Registrar's Office. Upon receipt of the scores, an evaluation for credit will be performed and the student will be notified by mail or email of the evaluation results in approximately two to four weeks.

A score of 4 or better on each exam will receive between 3-10 credits for most examinations. Students successfully completing an IB Diploma Program may be awarded a minimum of 24 semester credits. Students who have earned an IB Diploma with a score of less than 4 on any exam may be awarded less than 24 credits. Please refer to Colorado GB 03-1108 Section 1, sub section (VII) (2) (d) 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).

Military Credit

Military service credit is evaluated when official copies of transcripts are received. Army, Navy, and Marine personnel should submit a Joint Service Transcript (JST). Courses and occupation experience are evaluated according to the American Council on Education (ACE) Guidelines, through consultation with discipline faculty.

Program Requirements

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.

Institutional Requirements for 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 56 semester hours must be earned from a four-year institution. Programs utilizing Escrow Credit may substitute credits from a 2-year institution to count towards this requirement. See individual programs and Escrow Credit policy for addition information.
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 extended studies for-credit courses are considered resident credit.)
5. For degree purposes, CSU Pueblo accepts a maximum of 64 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 60 semester hours earned immediately preceding graduation, no more than 30 may be completed at other colleges or universities. *Note: Some professional programs may be exempted from this policy. See specific program requirements for transfer exceptions.*
8. For degree purposes, CSU Pueblo accepts no more than 90 credits in total through transfer or other assessment of prior learning.
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 world language requirement.
15. Degree candidates must file a completed *Graduation Contract* with the Registrar's Office no later than the 4th week of fall and spring semester and no later than the 3rd week of the 12 week summer session of graduating term (check *Semester Notes* on-line or with the Registrar's Office for specific deadlines).
16. Degrees are issued only at the close of each semester and summer session.
17. Degrees will be granted at the end of the term during which the student completes all degree requirements. Degrees cannot be granted if the student has outstanding grades (NG) or incomplete grades (I).
18. Additional majors, emphasis areas, or minors will not be awarded or posted to a transcript after a baccalaureate degree has been granted.
19. Once a baccalaureate degree has been awarded, the student cannot repeat courses in order to improve the undergraduate grade point average.
20. All accounts with Colorado State University Pueblo must be settled before a diploma will be awarded or official transcripts will be issued.

Single Degree Requirements

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

Bachelor of Arts Degree: World Language Requirement

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

1. Second level of a world language (course number 102).
   - Students may test out of the course.
   - Completion of a world language course above 102 with a grade of C or better will satisfy the requirement.
2. Second level of ASL (course number 102).
   - Students may test out of the course.
   - Completion of an ASL course above 102 with a grade of C or better will satisfy the requirement.
3. WL 100 Intro to Comparative Linguistics (3 c.h.)s, *and* ANTHR 106 Language, Thought and Culture (3 c.h.)/ENG 106 Language, Thought and Culture (3 c.h.).

International students for whom English is a second language may substitute two terms of English courses (excluding ENG 101 Composition I (3 c.h.) and ENG 102 Composition II (3 c.h.)) for the world language requirement.

Because of the unique use of world languages in musical contexts (vocal repertoire in particular), students earning the Bachelor of Arts degree in Music may, in consultation with their advisor, complete the BA degree World Language Requirement with two 101-level World Language courses, chosen from Italian, German, French and Spanish.

Dual (Concurrent) Degrees

Students may choose to complete concurrently the requirements for two CSU Pueblo degrees. The second degree must be granted in a major area other than that in which the first baccalaureate degree is granted, and both degrees must be granted from CSU Pueblo. 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 graduation contacts. Successful completion of concurrent degrees will result in two diplomas and both degrees are recorded on the student's academic transcript. For students wishing to complete more than two degrees simultaneously, a minimum of 30 additional credits is required for each additional degree.

Dual Degrees with Double or Multiple Majors

Please refer to the Undergraduate Students with a Double or Multiple Majors (p. 70) policy.

Second Bachelors (Degree Plus) Requirements

A second baccalaureate degree may be granted in a major area other than that in which the first baccalaureate degree was granted. Beyond the first degree, students must complete no fewer than 30 semester hours of the new major for the second degree and these credits must be completed at Colorado State University Pueblo ("in-residence"). Students must complete the 30 semester hours with a minimum grade point average of 2.000 while in Degree Plus status. The additional 30 hours of credit must apply to the new degree and 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.

Joint (3+2) Undergraduate & Graduate Degrees (Integrated & Non-Integrated) Requirements

CSU Pueblo offers several programs in which well-prepared undergraduate students may complete a bachelor's degree and master's degree simultaneously. Students may apply to a 3+2 graduate program upon successful completion of at least 60 credits. If accepted into the 3+2 graduate program, students will have the opportunity to fulfill

integrated requirements toward both undergraduate and graduate degrees. A maximum of 12 required graduate credits may be applied simultaneously to both the declared undergraduate and graduate degree programs, except for programs requiring completion of more than 138 total hours. All graduate degree course requirements must be completed. Completion of a 3+2 degree program requires a minimum of 138 total credits. However individual degree programs may require more than 138 credits to satisfy the unique discipline requirements. Once admitted to the 3+2 degree program:

- The student must maintain good academic standing for both undergraduate and graduate programs. To remain in good standing, a student's cumulative and graduate GPA must remain at a 3.00 or better. The graduate GPA will be determined from all approved coursework attempted at the 500 level or above.
- Courses at the 500-level or above completed six or more years before the date of graduation, either at CSU Pueblo or another institution, will not be accepted as satisfying graduation requirements without written approval of the student's graduate program director/coordinator.
- Courses at the undergraduate level (100-499) may be eligible to be repeated for academic credit. Please see the Repeating Courses for Academic Credit section of the catalog for more details.
- Courses at the 500-level or above may be repeated for a maximum of six semester hours of graduate credit. When a graduate level course is repeated, both the subsequent grade and the original grade are included in the grade point average.
- 3+2 students are required to be continuously registered in the fall and spring semester throughout their degree program. Students may fulfill this requirement by being registered for a credit-bearing course. As an alternative, students may opt for a Continuous Registration (CR) status. Please see the Continuous Registration section of the catalog for more details.
- Students not maintaining graduate academic standards, or who choose to opt out of the 3+2 program may complete the declared undergraduate degree. Consult with program director and undergraduate advisor for assistance.
- 3+2 students are eligible for graduation with undergraduate university scholastic honors.

Single 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.**

Concentration/Specialization/Track

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

Undergraduate Students with a Double or Multiple Majors

Double Major with Same Degree Type

If both completed majors are of the same degree type (e.g., both B.A., or both B.S.) and the student has fewer than 150 credits, the student will be awarded a single degree which displays all majors earned on one diploma.

Double Major with Different Degree Types

If the completed majors are of a different degree type (e.g. B.A and B.S) and the student has fewer than 150 credits, the student must clearly mark their degree type on the graduation contract at the time of submission:

- One diploma listing only the primary major's degree type (e.g., B.A. in... plus additional major without other degree type reference) and listing all majors conferred.

Degree Conferral Before Completing Second Major Requirements

Students must complete degree requirements for the first (primary) major before they can graduate. If a student does not intend to complete the second major's requirements of 30 or more credits, that major must be dropped before the degree can be conferred for the primary major.

Students may not use the same credits from the second (dropped) major that were used to complete requirements for the first (primary) major degree conferral.

For example, a student pursues a double major in Computer Information Systems (primary) and Spanish (secondary). Then, but chooses to drop the Spanish major and only have Computer Information Systems conferred. If any of the Spanish courses are needed to meet any of the requirements for the conferral of Computer Information Systems, these credits are locked in with the degree conferral and cannot be used again.

If the student chooses to readmit as a Second Bachelors (Degree Plus) and wishes to return as to complete the Spanish (dropped) major, the student may have to pursue Spanish with a concentration as some of the original Spanish credits were previously used to complete requirements for the first (primary) major degree conferral.

Bachelor of Applied Science & Second Majors

A student pursuing a B.A.S cannot not have multiple majors.

Minor Requirements

Minors consist of a sequence of courses in a specific academic discipline which is established by the department offering the minor. A minor cannot be completed independently and must be completed simultaneously with a major degree program. Additionally, minors must be declared before degree conferral. 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.

Certificate Requirements

A certificate program is a focused program of study requiring a minimum of 9 credits. Completed certificate programs will appear on official transcripts and students will receive a printed certificate. Each certificate program at the University has specific completion requirements, which must be met prior to the certificate being awarded. In addition, students must fulfill the following requirements for completion.

1. Students must be admitted to the University to be awarded a certificate.
2. Students must have a CSU Pueblo cumulative certificate program GPA of 2.00 or better at the time the certificate is awarded, unless stated otherwise within the specific certificate program.
3. Students must complete the certificate program's minimum number of hours of approved coursework.
4. A minimum of 50% of the credits in a certificate program must be earned in residence at CSU Pueblo, unless otherwise specified by the program. Students must submit a Certificate Contract signed by the student's advisor during the semester term in which completion is to occur. The deadline for submission is published in the University Catalog, Semester Notes, and Academic Calendar.
5. If students are completing a graduate certificate program, they must provide proof of an undergraduate degree.
6. Successful completion of the course(s) within an undergraduate or graduate certificate program or the award of a certificate does not guarantee admission to an associated degree program.
7. Credits earned within a certificate program can be used toward a degree unless otherwise stated within the degree program.
8. If a student is pursuing a bachelor's or master's degree, a certificate may be conferred independently of their degree program.
9. Certificate candidates must complete and submit the Certificate Conferral Contract to the Registrar's Office within the term they would like their certificate conferred. All certificate conferals will be processed at the end of the semester in conjunction with degree conferrals. For contract due dates, please reference the contract form.

Registration

Registration dates are published in the CSU Pueblo Academic Calendar (https://www.csupueblo.edu/registrar/academic-calendar/) in advance of each registration period. Students can register through PAWS, with their advisor, or in the Registrar's Office.

Priority Registrations

Continuing* Undergraduates & Graduates

- First Monday of Registration

New* & Re-Admit

- First Friday of Registration

Military Student Priority Registration

- Colorado State University Pueblo offers priority registration to students using veteran education benefits, military members, and qualifying dependents who submit appropriate documentation.
- Active military (duty), veterans, and qualifying dependents using TA/VA benefits will be given priority registration status.

**Students are considered Continuing Students if they are Continuing Undergraduate Degree-Seeking or Graduate Students at CSU Pueblo and have completed one or more semesters at CSU Pueblo. New students are those students with a new and re-admit status (students who have been absent for two or more major (Fall/Spring) semesters). All Military students will receive priority registration, and will be notified of specific days and/or times for registration.*

Advisement

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

Undeclared academic advising for continuing and new undeclared transfer students will be handled by the PACK Center, located in the Library and Academic Resources Center, LARC, Room 151.

All first-year, first-time students are advised through the PACK Center located in the Library and Academic Resources Center, LARC, Room 151.

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

Student Status	Credits
Full-time	12 or more credits
Three Quarter-Time	9-11 credits
Half-time	6-8 credits
Less than half-time	Below 6 credits

Graduate Program

Student Status	Credits
Full-time	9 or more credits
Three Quarter-Time	7-8 credits
Half-time	5-6 credits
Less than half-time	Below 5 credits

Summer Session

Undergraduates

Student Status	Credits
Full-time	6 or more credits
Three Quarter-Time	4.6-5.9 credits
Half-time	3-4.5 credits
Less than half-time	Below 3 credits

Graduate Program

Student Status	Credits
Full-time	5 or more credits
Half-time	3-4 credits
Less than half-time	Below 3 credits

You may print an Enrollment Verification Certificate online through PAWS or visit the Registrar's Office for certification of enrollment status

and term(s) of attendance. (Please note that the above schedule for enrollment status may differ from the full-time/half-time schedule as recognized by Financial Aid.)

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

Class Hours & Credit Hours

Colorado State University Pueblo offers two traditional semesters (Fall and Spring), and 4, 8, and 12 week summer sessions. CSU Pueblo's policies and practices are consistent with the credit hour definition provided by Colorado Department of Higher Education and the Higher Learning Commission. The University has adopted a standard lecture class minimum of 2,250 minutes of combined in-class (750 minutes) and out-of-class (1,500 minutes) time per credit hour per semester. The University's course schedule reflects the need to surpass this minimum to account for potential reductions that may be caused by inclement weather or other unforeseen circumstances.

In a traditional lecture course of three credit hours, sample calculations would be:

MWF 14 (weeks) x 55 (minutes) x 3 (days) = 2,310 minutes in-class, plus twice that amount outside-of-class: to this subtotal of 6,930 minutes we add 140 minutes for the final exam yielding a total of 7070 minutes.

Hybrid courses meet in-class for 25% to 75% of the required minutes and online courses meet 0% to 24% in-class, with both formats including the appropriate out-of-class minutes to exceed the required 2,250 minutes per credit per semester.

For more information regarding the credit hour, review the University's official Credit Hour Policy.

Course Loads & Overloads

Enrollment in more than 18 credit hours in a given term is defined as an overload. Both resident and extended studies 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 and Department Chair are one-in-the-same). 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 term.**

Administrative Drop for Non-Attendance

CSU Pueblo reserves the right to administratively drop all students from the University who fail to attend or participate in an enrolled course session at least once prior to the course drop date, including face-to-face, hybrid, and online courses. The University will attempt to contact the student before an administrative drop is enacted. This is done to ensure that CSU Pueblo contributes to student success and accurately reports student enrollment.

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

Student Bill of Rights

Four Year Graduation Agreement

C.R.S. 23-1-125. Commission directive –student bill of rights

The General Assembly hereby finds that students enrolled in public institutions of higher education shall have the following rights:

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

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 34%.

Time Limit of Credit

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

Any course substitutions, waivers, exceptions, or petitions completed prior to readmission must be submitted to the appropriate approving authority.

Transcript of Credit

Official transcripts are issued by the Registrar's Office at the **signed** request of the student and are usually issued within two working days from the date the signed request is received in the Registrar's Office.

Students should allow extra time for issuance near the end of term due to the processing of grades. While grades are being processed, transcripts (official or unofficial) will not be released during the week of finals and the week following finals.

CSU Pueblo will not accept e-mail or telephone transcript requests.

Fees

There is a non-refundable fee for each official transcript. Be sure to check with the Registrar's 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.

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

How to Order a Transcript

All transcript orders must be placed through Parchment **(**https://www.parchment.com/u/registration/34174/account/**).**

1. Create a New Learner Account
2. Follow the steps to complete your order
3. Please mark one of the following options: Send Now, Hold for Grades, or Hold for Degree Conferral

Note: If you don't know your student ID you can put N/A in the box.

Transfer

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.

Credit is accepted by CSU Pueblo from institutions accredited by the Higher Learning Commission or similar regional accrediting bodies. For credit toward degree requirements, CSU Pueblo accepts a maximum of 64 semester hours from community or junior colleges and/or a maximum of 90 semester hours from four-year institutions toward degree requirements. For degree purposes, CSU Pueblo accepts no more than 90 credits in total through transfer or other assessment of prior learning.

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 only accepts Associate of Arts (AA) or Associate of Science (AS) degrees from regionally accredited out of state institutions as fulfilling the University's general education requirements if CSU Pueblo's entire general education core is completed with acceptable transfer credit. However, some CSU Pueblo majors may have specific general education requirements that must be completed. Associate of Applied Science (AAS) and the Associate of General Studies (AGS) degrees are not transferrable to CSU Pueblo, but will be evaluated on a course by course basis.

Credit by Exam and Credit for Prior Learning earned and transcripted by Colorado Institutions will be accepted and follow the institutional transfer process.

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

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

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

Military service credit is evaluated when official copies of transcripts for military schools are received and may be counted toward a baccalaureate degree. Army, Navy, and Marine personnel should submit a Joint Service Transcript (JST). Air Force personnel should submit a Community College of the Air Force (CCAF) Transcript. Courses are evaluated according to the American Council on Education (ACE) Guidelines. The Military and Veteran's Success Center notifies and directs each student to an academic advisor who will assist them with choosing a program of study and clarify the applicability of JST transfer credits to program(s) of study. Students and advisors may refer to DARSweb "what if?" audits to explore JST transcript credit application within potential major(s).

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

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

International Transfer Students & Domestic Students with International Transcripts

All international documentation must be translated, certified, and authenticated through an approved credentialing agency. For further information regarding this process, refer to the International Students Admission Requirements (p. 17) section of the catalog.

Appeals Process

Disputing Transfer for Credits

Once an admitted student receives an official transfer evaluation, they may contact the Registrar's Office to discuss any issues related to their evaluation. If a student wishes to use credits that were not deemed a direct equivalent to a course at CSU Pueblo, a student may contact their advisor for submissions. To appeal coursework not originally accepted in

transfer, students may use the Appeals for Approval of Transfer Credits form on the Registrar's Office web page and submit with a syllabus to the appropriate department for review. If approved, the coursework will be forwarded to the Registrar's Office to post to the student's record. If denied, the student will be notified via University email or US mail.

Appeal for Approval of Regionally Accredited Transfer Credits

If a student disputes the University's evaluation of transfer credits for a regionally accredited institution, the student must submit an Appeal for Approval of Transfer Credits form in the same semester that they are admitted to CSU Pueblo. Continuing students must submit an official transcript no later than the end of the semester immediately following the one in which the credits were earned. The student must submit the form(s) to the appropriate Department Chair for approval along with the required syllabus for the course. The Academic Department will have 30 calendar days to review the appeal and, if approved, forward the appeal to the Office of the Registrar. The Academic department will notify the student via University email or U.S. mail within 30 days if the appeal was denied. Approved appeals will be processed by the Registrar's office and posted to the student's transcript. Note: If the student fails to file the form within the first semester of transfer, it will not be considered. If the department fails to notify the student within 30 days, the student's appeal will be processed.

If an appeal is denied by the Department Chair, a student may appeal to the appropriate Dean overseeing the department where the Department Chair resides. The appeal must be filed within fifteen (15) calendar days of the postmark or email notification to the student of the departmental decision. If the student fails to file an appeal within this time period, the Chair's decision shall be binding.

The Dean will have (15) calendar days to respond to the student. Should the Dean deny an appeal, the student may appeal to the Provost within fifteen (15) calendar days of the postmark date or email notification. If the student fails to file an appeal within this time period, the Dean's decision shall be binding. The Provost shall review and reach a decision on the appeal within fifteen (15) calendar days after the appeal is filed. The student will be notified in writing via University email or U.S. mail of the decision regarding the transfer appeal and rationale for the decision. The Provost's decision will be final.

Appeal for Approval of Non-Regionally Accredited Institution Transfer Credits

Appeals of transfer credits from non-regionally accredited institutions must be submitted by the student on an Approval of Transfer Credits form after they completed one full-time semester at CSU Pueblo or 12 credit hours with a 2.0 GPA or better. Students must submit the form and course syllabus to the appropriate department(s).

The Department Chair will have thirty (30) days to review the form and the student will be notified in writing via University email or U.S. mail if the coursework was denied. Approved coursework is forwarded to the Registrar's office to add to the student's academic record. Note: Once a Department Chair denies the appeal, no further action can be taken since it is University policy to deny non-regional accredited institution credits.

Appeal for Approval of Non-General Education Coursework Over 10 Years

Non general education courses over 10 years old will not be accepted according to University policy. If a student wishes to appeal this policy, an Appeal of Transfer Credits form must be sent to the appropriate department for review within the same semester the student is admitted. Once the Department Chair reviews the coursework, the student will be notified in writing by the department via University email or U.S. mail if the coursework was denied. Approved coursework will be forwarded to the Registrar's office to add to the student's academic record. Once a department denies the appeal, no further action can be taken since it is a University policy to deny courses over 10 years old. Note: If the student fails to file the form within the first semester of transfer, the appeal will not be considered.

Appeal for Approval of General Education Status of a Transfer Course

In-state general education courses should be marked as GT pathways by the State of Colorado. If CSU Pueblo has not indicated that you are receiving general education credit for these courses, contact the Registrar's Office.

Courses that have not been earmarked as receiving general education status from an out-of-state institution may be appealed to the appropriate Department Chair for review within the same semester a student is admitted. Students must attach a course syllabus to the Appeal for Approval of Transfer Credits form and should attach documentation indicating the originating institution considered this course part of its general education core. Approved coursework is forwarded to the Registrar's office to add to the student's academic record. If a department denies the appeal, no further action can be taken. The academic department will notify the student in writing via University email or U.S. mail of the final decision. Note: If the student fails to file the form within the first semester of transfer, it will not be considered.

Colorado State University Pueblo has created the processes listed above for students to dispute the transfer of credit, if necessary. Students may also file a complaint through the Colorado Department of Higher Education.

Time Limitation on Credit

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

Any course substitutions, waivers, exceptions, or petitions completed prior to readmission must be submitted to the appropriate approving authority.

GRADUATE SCHOOL

Graduate programs and curricula at Colorado State University Pueblo are developed by the faculty and administration in the instructional colleges and schools and are administered by graduate program directors or coordinators in conjunction with the Graduate School. Academic policies affecting graduate programs and courses are reviewed and approved by the University Graduate Studies Board and governed by the Faculty Senate.

3+2 Programs

3+2 programs are Joint Undergraduate and Graduate degree programs. The following master's degrees can be completed in conjunction with 3+2 programs (options to complete undergraduate and graduate degrees simultaneously): Athletic Training, Biochemistry, Biology, Business Administration, Cannabis Biology Chemistry, Chemistry, Education (Health & PE), Industrial and Systems Engineering, and Mechatronics Engineering. The MBA program can also be completed as part of the Integrated Construction Management, Bachelor of Science/Master of Business Administration program, and the Integrated Bachelor of Science/Master of Business Administration: Healthcare Administration Concentration program.

3+2 programs are only available to degree-seeking undergraduate students. The 3+2 programs are not available to degree-plus students, guest students, or non-degree-seeking students.

Graduate Degree Programs

Colorado State University Pueblo offers selected graduate courses and programs for degree-seeking and non-degree students.

Graduate Degree Programs

Program	Department	College	Available Online
Athletic Training, Master of Science (p. 209)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)	
Biochemistry, Master of Science (p. 424)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Biology, Master of Science (p. 403)	Biology (p. 387)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Business Administration, Master of Business Administration (p. 513)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	(Offered online)
Business Administration: Cybersecurity Concentration, Master of Business Administration (p. 515)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	
Business Administration: Healthcare Administration Concentration, Master of Business Administration (p. 515)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	(Offered online)
Business Administration: Public Management Concentration, Masters of Business Administration (p. 516)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	(Offered online)
Cannabis Biology Chemistry, Master of Science (p. 427)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Chemistry, Master of Science (p. 434)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Education: Art Education Concentration, Master of Education (p. 131)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Curriculum Instruction Concentration, Master of Education (p. 134)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Early Childhood Education Concentration, Master of Education (p. 137)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Early Learning Concentration, Master of Education (p. 140)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)

Education: Educational Leadership Concentration, Master of Education (p. 143)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: English Concentration, Master of Education (p. 146)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Gifted Education Concentration, Master of Education (p. 149)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Health Physical Education Concentration, Master of Education (p. 151)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Instructional Technology Concentration, Master of Education (p. 154)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Linguistically Diverse Concentration, Master of Education (p. 157)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Music Education Concentration, Master of Education (p. 160)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Reading, Language, Literacy Concentration, Master of Education (p. 164)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Space Studies for Educators Concentration, Master of Education (p. 166)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Special Education Concentration, Master of Education (p. 169)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: World Language Concentration, Master of Education (p. 172)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Industrial Systems Engineering, Master of Science (p. 482)	School of Engineering (p. 468)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Mechatronics Engineering, Master of Science (p. 485)	School of Engineering (p. 468)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Nursing: Adult/Gerontology Acute Care Nurse Practitioner Concentration, Master of Science (p. 556)	School of Nursing (p. 539)	School of Nursing (p. 539)	
Nursing: Adult/Gerontology Acute Care/Family Nurse Practitioner Concentration, Master of Science (p. 561)	School of Nursing (p. 539)	School of Nursing (p. 539)	
Nursing: Nurse Educator Concentration, Master of Science (p. 565)	School of Nursing (p. 539)	School of Nursing (p. 539)	(Offered online)
Nursing: Nurse Manager Leader Concentration, Master of Science (p. 566)	School of Nursing (p. 539)	School of Nursing (p. 539)	(Offered online)
Nursing: Psychiatric-Mental Health Nurse Practitioner Concentration, Master of Science (p. 570)	School of Nursing (p. 539)	School of Nursing (p. 539)	
Social Work, Masters of Social Work (p. 360)	Social Work (p. 353)	College of Humanities, Arts, and Social Sciences (p. 232)	

Admissions

- Graduate School Admission Policies (p. 77)
- Graduate School Admission Procedures (p. 78)

Academic Policies

- Graduate School Acceptance of Transfer Credits (p. 77)
- Graduate School Appeals (p. 78)
- Graduate School Credit for Prior Learning (p. 78)
- Graduate School Grading System (p. 79)
- Graduate School Program Requirements (p. 79)
- Graduate School Registration (p. 80)
- Graduate School Time Limit of Credit (p. 81)

Graduate School Acceptance of Transfer Credits

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

Graduate School Admission Policies

Admission to a particular degree program must be approved by the program director/coordinator upon review of a completed application. Applicants will receive a letter of acceptance/denial from the Graduate School.

Graduate Status

Regular Status

Regular status will be given to degree-seeking students admitted to the Graduate School and graduate program as outlined in this catalog. The requirements include:

- A baccalaureate degree from an institution accredited by the regional accreditation agency (or equivalent). Admission to an approved joint degree (3+2) program at CSU Pueblo does not require a baccalaureate.
- The minimum undergraduate GPA established for all programs is 3.000.
- Submission of satisfactory scores from a standardized admissions test if required by the program. 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.
- Any additional requirements for the selected program, including completion of leveling courses to correct undergraduate deficiencies. Programs may specify conditions which may include higher grade-point averages, required scores on entrance examinations, or undergraduate major or course requirements. Programs may also limit admissions based on capacity.

Conditional Status

The University provides a conditional status for applicants who have not satisfied the minimum requirements.

The Graduate School, on the recommendation of the program director, may admit an applicant under conditional status. Such special action may be taken if there are positive indicators of the potential for success in graduate studies (e.g., high GRE or GMAT scores, solid upper-division academic performance, or outstanding professional achievement).

When admitted conditionally, the applicant will be notified of the specific conditions for moving to Regular Graduate Status and the timeframe for achieving those conditions. Conditions may include additional course work beyond the degree requirements; specified scores on standardized admissions tests; or other conditions required by the program director/coordinator. A written statement of the conditions will be included in the official admission letter.

If the conditions are met within the allocated timeframe, the program director will notify the Graduate School that the student has achieved Regular Graduate Status. If not successful, the student will be notified by the Graduate School that conditions were not met and the student will be dismissed from the program. A maximum of 12 hours of graduate course work can be taken toward the degree by students on Conditional Status.

Non-Degree Seeking Students

A student who desires to take graduate-level courses (500+) for personal enrichment, for job advancement, or for transfer to another institution, may do so through either the Non-Degree Status option or through the Guest (for credit) option.

Non-Degree Status

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

A maximum of twelve graduate hours (27 graduate hours for students in the School of Education) of CSU Pueblo credit earned as a non-degree seeking student may subsequently be applied toward a master's degree if approved by the degree-granting program.

Guest (For Credit) Student Status

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

Western Regional Graduate Program

CSU Pueblo participates in the Western Regional Graduate Program (https://wiche.edu/wrgp/), allowing graduate students from select states (https://wiche.edu/states/) to receive a discounted tuition rate equal to the in-state rate. Qualifying students must be residents of a WICHE state (https://wiche.edu/states/) for tuition purposes. No additional application is required.

Same Degree/Same Program Policy

Eligibility

In certain instances, applicants may wish to seek a second master's degree in the same program for which they already hold a master's degree to fulfill new career, professional, or specialization requirements. These applicants may seek a second master's degree for the same discipline if they:

1. Meet the University admission requirements; and
2. Meet the master's program admission requirements. Individual programs may elect not to consider applicants who already hold the same degree in the discipline; applicants should consult with the graduate program coordinator of the prospective program.

Requirements

The second master's degree must be based on:

1. A different option from the first master's degree (or in a different area of specialization in the case of a master's program without differentiated options); and
2. A curriculum distinct from the first master's degree containing a minimum of 30 semester hours of coursework different from those taken to earn the first master's degree, and
3. At least seventy percent of the coursework must be completed in residence and include a culminating experience.

Graduate Fresh Start

Graduate students who discontinue one graduate program with a cumulative grade point average below 3.000 and are fully admitted to a different graduate program (not a different emphasis) are eligible to apply for a Graduate Fresh Start. Students who take advantage of Graduate Fresh Start will not have grade point averages carried forward in the new graduate program. Courses previously completed with an earned grade of B or higher may count toward graduation only upon approval by the program director.

Graduate School Admission Procedures

An applicant who has received a baccalaureate degree from an accredited institution and who wishes to begin a graduate program must submit an application through the application portal, found at https://www.csupueblo.edu/admissions/apply-now.html.

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.
2. Official transcripts of all colleges and universities attended must be sent directly to the Office of Admissions by each institution. Records received directly from students may be used for advising purposes only.
3. An official score from the appropriate standardized entrance exam must be provided. See specific programs for the required exam(s) and scores.
4. A personal statement.
5. For international applicants, a minimum score of 61 on the TOEFL internet-based (iBT) exam and a minimum band score of 5.5 on the International English Language Testing System (IELTS) test. Note, a minimum score of 79-80 on the TOEFL internet-based (iBT) exam or a minimum band score of 6.0 on the IELTS is required for the Master of Business Administration (MBA) and the Master of Science in Nursing. Students who complete an undergraduate degree at an institution in the United States are exempt from this requirement. See requirements for International Student Admissions (https://catalog.csupueblo.edu/admission-requirements/international-students/) for more information.
6. Specific program requirements; see individual pages in this Catalog.

Graduate School Appeals

All decisions made in regard to Graduate School policies, procedures, and regulations may be appealed. Appeals must be made in writing first to the appropriate graduate director/coordinator, then to the goes to the Graduate Studies Board, and then to the Office of the Provost.

The academic grade appeals process is the same as is described in the undergraduate section on appeals.

See the *Academic Policies* section of this catalog.

Graduate School Credit for Prior Learning

Prior learning is non-college or experienced-based learning that has been attained outside of accredited postsecondary education systems. Credit for Prior Learning includes learning acquired from work and life experiences. It is awarded for graduate-level learning involving knowledge, skills, and competencies that students have obtained. Credit for Prior Learning may apply to a degree or certificate but does not fulfill the university residency requirement. CSU Pueblo students may seek graduate#academic credit for prior learning by first contacting the Adult & Prior Learning Assessment Office. Information about the applicability of prior learning within a specific discipline and assistance with the requirements and process for obtaining prior learning credit will be provided. A portfolio demonstrating completion of the learning outcomes and objectives of the specific course(s) in a single prefix will usually be required to apply for this credit. The academic department chair or graduate program director of the relevant graduate program will identify a faculty member to review the portfolio of up to six credit hours and determine whether credit(s) should be awarded.#A separate portfolio must be submitted for each prefix to be evaluated and a fee of $250 will be assessed per portfolio submitted. This fee is non-refundable even if credit is not awarded.Portfolios approved by the program director or designee must be turned into the Registrar's Office by the last day of classes for the appropriate term to have the prior learning credit posted. Credits earned through CPL will be posted at the end of the term. Please see the academic calendar for dates.

The maximum number of graduate credit hours allowed for prior learning is six. Credit for Prior Learning is granted only for experiences gained within 12 years from the date the degree is expected to be awarded.

Colorado State University Pueblo has industry agreements for specific certifications which may incur a different fee structure.

Graduate Work Taken by Undergraduate Seniors

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

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

Dual Degree Credit

Up to six semester hours of elective credit may be applied to more than one graduate degree program if the degrees are pursued concurrently pending approval of the graduate committees of the programs involved and the Graduate Studies Board.

Graduate School Grading System

Graduate courses are graded in an alphabetical system with the interpretations in the chart below.

Students may apply no more than six semester hours of work with a grade of C/C+ toward graduation requirements. Only grades A through C, and S, fulfill graduation requirements for graduate programs.

Grade	Description	per Credit
A+		
A		4.00
A-		3.67
B+		3.33
B		3.00
B-		2.67
C+		2.33
C		2.00
D+		1.33
D		1.00
D-		0.67
F		0.00
I	Incomplete	
S	Satisfactory	
IP	In Progress	
U	Unsatisfactory	
W	Withdrawal	
WN	Withdrawal for Non Payment	
AU	No Credit	

Students may apply no more than six semester hours of work with a grade of C/C+ toward graduation requirements. Only grades of A through C, and S fulfill graduation requirements for graduate programs.

Graduate School Academic Standing

The cumulative graduate GPA will be determined from all approved coursework attempted at the 500 level or above. Coursework must be approved by the student's graduate program coordinator or director. 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 Academic Watch. Students have one semester to show progress toward good standing as measured by increasing the graduate GPA from the previous semester. Students placed on Academic Watch will be dismissed whenever progress toward good standing is not achieved; after an Academic Watch student has accrued 15 credits; or whenever the graduate GPA falls below 2.500. Graduate students may repeat a maximum of six semester hours of graduate credit. When a course is repeated, both the subsequent grade and the original grade are included in the graduate grade point average.

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

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

Graduate School Program 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 coursework 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. Hold Regular Student Status.
3. Complete the program's minimum number of hours of approved coursework.
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 term in which graduation is to occur. The deadline for submission is published.
6. Complete a thesis or directed research project if required by the program. If choosing the thesis option, submit an electronic copy

and one unbound paper copy of the approved thesis to the Library. Reproduction and binding costs are the responsibility of the student. (Individual programs may require additional bound copies.)

Note: Enrollment for thesis, dissertation, 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, dissertation, or directed research coursework will count toward meeting graduation requirements for MS/MA degrees.

Undergraduate Leveling Courses

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

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

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

Comprehensive Examinations

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

Graduate Thesis Policies

Thesis Option

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

The graduate committee shall consist of at least three faculty members approved by the thesis advisor and the program director/coordinator. At least two members of the committee must be from within 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 program director/coordinator.

The research/thesis 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.

Non-Thesis Option

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

Thesis Instructions

Students writing a thesis in partial fulfillment of graduation requirements must submit an electronic copy and one unbound paper copy of the approved thesis to the University Library. (Students should contact the Office of the Dean of Library Services for further details.) The student will pay the Library for the binding cost (based upon the fee schedule maintained by the Library) of the required copy plus any additional copy bindings requested by the student. The bound thesis will be submitted to the library. Individual programs may require additional bound copies.

The Thesis Must:

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

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

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

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

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

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

Oral Defense of Research

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

A report of the outcome of the oral defense must be filed with the program director/coordinator. 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.

Graduate School Registration

To remain in Active Student Status graduate degree candidates must be enrolled for at least one credit hour or registered for Continuous Registration (CR 500) during the term (Fall, Spring, or Summer) in which they will complete their degree.

Graduate Advising

Each graduate degree area has a program director/coordinator that serves as the initial graduate advisor to all graduate students in the program. The responsibilities of the graduate advisor and the graduate committee include advisement, approval of the degree plan, approval of

a thesis, dissertation, or directed research topic and final document (if appropriate), and administration and approval of comprehensive and/or oral examinations and thesis/project defense.

Continuous Registration Requirement

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 for the term in which they wish to enroll.

As an alternative, students may opt for a Continuous Registration (CR) status. Registration for CR status is accomplished in the same way as registration for courses. Students registering for CR will be assessed a fee for each semester of CR registration. Students graduating in any term (including summer) are required to be registered for at least one credit or CR. See the Graduate Studies Registration Overview.

Subject to the established time limits for the earning of graduate degrees and the various academic requirements, CR registrants need not apply for readmission should they wish to take additional graduate courses. Such students are ensured a place in their graduate programs as long as they remain in good academic standing.

The availability of the CR option shall not supersede any other registration requirements to which students may be subject. For example, a student's advisory committee may require additional coursework. Similarly, some departments may require credit-bearing registration until the degree is completed.

Course Loads

Graduate students enrolled in nine or more semester credit hours are considered full-time graduate students (five or fewer hours in summer semesters); those enrolled for five (or fewer) semester credit hours are considered part-time graduate students (three or fewer hours in summer semesters).

Graduate School Time Limit of Credit

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

SPECIAL ACADEMIC PROGRAMS & SERVICES

Special Academic Programs

- Associate of Arts (p. 82)
- Associate of General Studies (p. 82)
- Center for Honors & Leadership (p. 84)
- Center for Teaching & Learning (p. 84)
- Communities to Build Active Stem Engagement (p. 84)
- Microcredentials (p. 85)
- President's Leadership Program, Minor (p. 86)
- Student & Exchange Visitor Program (p. 88)
- University Honors Minor Program (p. 89)
- University Studies (p. 90)

Special Student Services

- Athletics (p. 83)
- CSU Pueblo Bookstore (p. 84)
- CSU Pueblo Food Services (p. 85)
- Math Learning Center (p. 85)
- Microcredentials (p. 85)
- Occhiato Student Center (p. 86)
- Pack Center (p. 86)
- Rocky Mountain Public Media (RMPM) (p. 88)
- University Library (p. 90)

Associate of Arts

The Associate of Arts degree is conferred retroactively to undergraduate students who have stopped out within the past 10 years from CSU Pueblo without completion of a bachelors degree. Students must have previously earned at least 70 credits which fulfill these A.A. degree requirements. This retroactive degree program was implemented in response to the Colorado Re-Engaged (CORE) Initiative to enhance employment opportunities for past students through credential award. Student eligibility is determined by the Registrar's office, followed by outreach to eligible students informing them of steps to request degree conferral. This degree is only available for retroactive award. HLC accreditation final approval is pending and is anticipated during the fall 2023 semester.

Specific Admission Requirements

- A minimum of 70 total credits earned with at least 18 credits in residence at CSU Pueblo.
- Student has a CSU Pueblo cumulative GPA of 2.000 or higher. Grades in all courses for degree are C- or higher.
- No more than 14 credits earned in degree-seeking status at a Colorado two-year institution.
- Student has not enrolled in a any college-level credit-bearing courses for at least two consecutive semesters (fall and spring).
- Student was actively enrolled at CSU Pueblo within the 10 years prior to degree award.
- Student has not earned a degree at another institution after leaving CSU Pueblo.
- Student is identified by the Registrar's Office as verified for the credential.

Student Learning Outcomes

Students will demonstrate the General Education Learning outcomes.

Students will gain college-level skills and knowledge to support employment and advancement.

Assessment plan will include tracking of patterns of participation upon contact, typical prior majors and course prefix inventory, available placement information, or employment advancement following conferral, etc. for students completing this degree.

Specific Program Requirements

Course	Title	Credits
ENG 101	Rhetoric & Writing I (GT-CO1)	3
Choose one of the following:		**3**
ENG 102	Rhetoric & Writing II (GT-CO2)	3
ENG 115	Intro Tech Prof Writing GT-CO2	3
ENG 117	Intro. Scientific/Medical Writing (GT-CO2)	3
Must complete the following General Education content areas:		
History		3
Humanities	Must complete 3 separate courses.	9
Math		3
Natural Sciences	Must complete 2 lecture courses and associated lab courses.	8
Social Sciences	Must complete 2 separate courses.	6
Electives [1,2]		**35**
200-level or higher courses	General Education courses can be used to fulfill this criteria.	15

1 A maximum of 6 credits can be used from Physical Education Activity, Workshops, Research, and Sports Participation.

2 Courses cannot be double counted for credit towards graduation requirements.

Specific Graduation Requirements

Student has a CSU Pueblo cumulative GPA of 2.000 or higher. Grades in all courses for degree are C- or higher.

Associate of General Studies

The Associate of General Studies degree is conferred retroactively to undergraduate students who have stopped out within the past 10 years from CSU Pueblo without completion of a bachelors degree. Students must have previously earned at least 70 credits which fulfill these A.G.S. degree requirements. This retroactive degree program was implemented in response to the Colorado Re-Engaged (CORE) Initiative to enhance employment opportunities for past students through credential award. Student eligibility is determined by the Registrar's office, followed by outreach to eligible prior students informing them of steps to request degree conferral. This degree is only available for retroactive award. HLC accreditation final approval is pending and is anticipated during the fall 2023 semester.

Specific Admission Requirements

- A minimum of 70 total credits earned with at least 18 credits in residence at CSU Pueblo.
- Student has a CSU Pueblo cumulative GPA of 2.000 or higher. Grades in all courses for degree are C- or higher.
- No more than 14 credits earned in degree-seeking status at a Colorado two-year institution.
- Student has not enrolled in any college-level credit-bearing courses for at least two consecutive semesters (fall and spring).
- Student was actively enrolled at CSU Pueblo within the 10 years prior to degree award.
- Student has not earned a degree at another institution after leaving CSU Pueblo.
- Student is identified by the Registrar's Office as verified for the credential.

Student Learning Outcomes

Assessment plan will include tracking of patterns of participation upon contact, typical prior majors and course prefix inventory, available placement information, or employment advancement following conferral, etc. for students completing this degree.

Students will gain college-level skills and knowledge to support employment and advancement.

Specific Program Requirements

Course	Title	Credits
ENG 101	Rhetoric & Writing I (GT-CO1)	3
Math	Must be General Education	3
Must complete one course from three (3) of the below General Education content areas:		**9**
History		3
Humanities		3
Natural Sciences		3
Social Sciences		3
Electives [1,2]		**55**
200-level or higher courses	General Education courses can be used to fulfill this criteria.	15
Total Credits		**70**

1. A maximum of 6 credits can be used from Physical Education Activity, Workshops, Research, and Sports Participation.
2. Courses cannot be double counted for credit towards graduation requirements.

Specific Graduation Requirements

Student has a CSU Pueblo cumulative GPA of 2.000 or higher. Grades in all courses for degree are C- or higher.

Athletics

The Athletic Department at Colorado State University Pueblo offers 21-varsity intercollegiate sports. The ThunderWolves compete in the Rocky Mountain Athletic Conference as part of NCAA Division II. The RMAC consists of 15-member institutions throughout the states of Colorado, New Mexico, South Dakota, Nebraska, and Utah.

CSU Pueblo offers 11 women's sports, including basketball, cross country, golf, lacrosse, soccer, softball, swimming and diving, tennis, indoor and outdoor track & field and volleyball. The Thunderwolves compete in 10 men's sports, including baseball, basketball, cross country, football, golf, lacrosse, soccer, indoor and outdoor track and field and wrestling. Cheer and dance team opportunities are available to men and women as well.

Pack Athletics boasts some of the finest facilities in all of NCAA Division II. Since 2008, the commitment to the athletic facilities by the University and private donors has ushered in a new era for ThunderWolves Athletics. CSU Pueblo touts the addition of the 6,500-seat ThunderBowl (2008), renovation of the 4,300-seat Massari Arena (2008), construction of the Art & Lorraine Gonzales Soccer/Lacrosse Stadium (2016) and the renovation of the Rawlings Baseball and Softball Complexes (2020). The highly anticipated indoor training center, The ART (2021), will open in the summer 2021. All athletic facilities are used mainly by the 580 Pack student-athletes, but are available to student and public use upon request.

The ThunderWolves have won two team national championships, over 85 RMAC championships, over 100 national tournament appearances, won eight regional tournament championships and over 40 top ten team finishes. CSU Pueblo has also crowned over 300 All-Americans and 30 individual national champions, which includes 150 All-Americans and 20 national championships in the last 10 years.

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

Rawlings Outdoors Sports Complex

Rawlings Sports Complex houses Pack baseball, softball, men's and women's soccer and men's and women's lacrosse programs.

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

In 2021, the new indoor training center, The ART, was constructed in memory of Arthur Henry Gonzales, one of Pack Athletics biggest supporters. The 32,000-square foot building will be used for all indoor sporting activities throughout the year.

ThunderBowl

The ThunderBowl is one of the premier football and track and field facilities in NCAA Division II.

The ThunderBowl is unique in that it was built completely with external funds raised by "Friends of Football", a collection of Pueblo community members and University alums, totaling over $13 million and allowing for the return of football, wrestling and women's track and field to CSU Pueblo in 2008. In 2021, the Friends of Football gifted the ThunderBowl to the CSU Pueblo Foundation.

The ThunderBowl features 6,500 seats, synthetic turf field, nine-lane all-weather track (resurfaced in 2020), throwing, jumping and pole vault areas, as well as a 27,000-square-foot field house, which includes a 2,700-square-foot athletic training room, equipped with a 12-seat cold plunge

and an underwater rehab treadmill and team meeting areas, student-athlete study-areas and lounges, and track and football coaches' offices

The stadium is also home to the Leomiti Warrior Center (https://gothunderwolves.com/facilities/leomiti-warrior-center/12/), a 10,000-square-foot strength and conditioning complex for all 21 varsity sports. The roof of the new weight room features an observation deck to provide opportunities for special events and pre-game hospitality.

Added in the summer of 2017 to the ThunderBowl was the ThunderTron video board, which lights up the north end of the stadium.

Massari Arena

Massari Arena seats 4,300 fans and is the home of Pack men's and women's basketball, wrestling and volleyball programs and is considered one of the finest indoor facilities in the RMAC and one of the top Division II arenas in the nation. The arena includes one section of premium chair back seating and a luxury box overlooking the arena, dubbed "The Wolf Pack Room".

Massari Arena re-opened in 2008 following a a two-year, $12 million renovation that expanded not only the arena, but the Sam Jones Sports Center, which includes a wrestling room, aerobics room, strength-training facility, racquetball and squash courts, swimming facility, athletic department offices, and classrooms for the University's Exercise Science department.

The arena is also connected to CSU Pueblo Student Recreation Center, which includes two gymnasiums, a climbing wall, indoor running track, and access to racquetball courts, cardio/weight room, and more. Membership to the Recreation Center is free for all CSU Pueblo full-time students.

In 2020, Massari Arena was renovated once again. CSU Pueblo installed a 55-foot video board, the largest in the RMAC. A new sound system and LED video tables along press row were also installed, adding to the multimedia fan experience of indoor events events, including annual Convocation and Commencement ceremonies. New curtains were added in the summer of 2020.

Center for Honors & Leadership

The Colorado State University Pueblo Center for Honors and Leadership (CHL) houses the University's Honors Program and President's Leadership Program, bolstering the unique strengths and identity of both, while maximizing the synergies and opportunities that develop and enhance both programs. The CHL offers Minors in Honors and Leadership to qualified CSU Pueblo undergraduates and equips students to be purposeful in the design of their college experience. CHL courses are experiential and focus academically on self-leadership, ethics, service learning, and community engagement. As part of their curriculum, CHL students engage in life-long academic and professional planning. The CHL services the University community at large in support of honors societies and other leadership and scholarship activities promoted to all students.

Academic Programs

- President's Leadership Program (p. 86)
- University Honors Minor Program (p. 89)

Center for Teaching & Learning

The Center for Teaching and Learning (CTL) courses offer students and faculty the opportunity to engage in topics that are at the forefront of our diverse faculty's research interests. Conducted in a seminar-style setting, instructors will provide an overview of the subject and present their scholarly work and related research innovations. Seminarians will be able to not only learn about the topic; they will be encouraged to engage with each other and with the instructor. CTL courses encourage a multidisciplinary examination of issues and topics by community members, faculty, and students from across the university. The goals of CTL courses are to focus the many intellectual perspectives and resources of CSU Pueblo on the study of important topics and to enact a sense of common purpose across the diverse communities at CSU Pueblo. These classes are offered to all students: undergraduate, graduate, and professional. Community members may audit these courses for a lowered tuition cost and a certificate of completion; faculty and staff are invited to apply to audit these courses, as room is available, at no cost as ongoing efforts to support professional development utilizing resources readily available on our campus.

Communities to Build Active Stem Engagement

Communities To Build Active Stem Engagement (CBASE) courses are designed to work in conjunction with and provide support to students within the CBASE program and to meet the goals of CBASE, specifically to provide:

- Students with a support network within their research community, and
- An opportunity to learn, develop, and receive feedback on their scientific growth throughout the CBASE program.

These courses are intended to familiarize students with the scientific process (including research development, scientific inquiry, written and oral dissemination of research, experimental design and implementation), and provide students with academic support and mentoring throughout their undergraduate career in the STEM community.

CSU Pueblo Bookstore

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-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 bookstore is also open before home football games.

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.

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 (http://www.csupueblobookstore.com/).

Visa, MasterCard, Discover, debit cards, and charges to Student Accounts may be used at the bookstore and online when making purchases. Dates when students can charge to their student accounts are published on the bookstore website and in PAWS.

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 us in person, or contact us at (719) 549-2146 during our regular store hours, or email us anytime at: csu-pueblobookstore@csupueblo.edu.

CSU Pueblo Food Services

Campus food services are located in several areas on campus for your convenience. Our main commitment is to provide fresh and healthy food to the campus community though the cafeteria in the Occhiato Student Center and various other retail locations. The hours of each location varies and is subject to change. Please contact Auxiliary Services at 719-549-2149 or visit Campus Dining (https://csupueblo.campus-dining.com/) if you have any questions.

Pack Cafe

The entrance is located on the North East side of the Occhiato University Center. This location is the main dining operation for residential students dining on a meal plan. It is also open to the public for a one time door rate. It is open for service during the operating hours below.

Monday thru Friday:

Meal	Hours
Breakfast	7:15 a.m. - 9:30 a.m.
Continental	9:30 a.m. - 11:00 a.m.
Lunch	11:00 a.m. - 2:30 p.m.
Late Lunch	2:30 p.m. - 5:00 p.m.
Dinner	5:00 p.m. - 7:15 p.m.

Saturday & Sunday:

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

Oh My Sushi

Oh My Sushi is located on the main level of the Culebra Residence Hall on the north side of campus. The menu includes

The normal hours of operation are as follows and are subject to change:

Monday thru Sunday: 11:00 am - 6 p.m

Campus Cafes

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

Monday thru Thursday: 7:00 a.m. - 9:00 p.m.

Friday: 7:00 a.m. - 4:00 p.m.

Saturday: 10:00 a.m. - 4:00 p.m.

Sunday: 1:00 p.m. - 9:00 p.m.

Solar Roast in the General Classroom Building (GCB) is located on the main level of the General Classroom Building (west side of campus). They offer made to order coffees, drinks, and grab-and-go foods. The normal hours of operation are as follows and are subject to change:

Monday thru Friday: 7:30 a.m. - 1:30 p.m

Einstein's Bros. Bagels is located on the main level of the Occhiato Student Center. They offer coffee, drinks, breakfast, lunch items and other grab-and-go foods. The normal hours of operation are as follows and are subject to change:

Monday thru Friday: 7:30 a.m. - 1:30 p.m

Da Brix is our newest venue on campus, recently remodeled featuring an inviting indoor/outdoor space chill after a long day of classes or work! Here to offer fresh pizza, wings, tenders, hot subs and more. Beer and wine are also offered during evenings; for those of age. Come shoot some pool or lounge on the patio with your peers. See you there!

Math Learning Center

The Math Learning Center (MLC) at CSU Pueblo gives students a place to work in a collaborative and supportive environment. The MLC, located in PM 132, is open each semester Monday through Friday. At the MLC students receive assistance from fellow students who are also trained tutors. Our tutors can help students in classes ranging from elementary algebra to statistics and calculus. The center is also the home of a computer laboratory dedicated to math students working online homework assignments. The MLC also provides a calculator rental program, where students can rent a graphing calculator for use in their math classes during the semester. The MLC provides CSU Pueblo students a place and a plan for success in college level and developmental math classes. For more information, call the Math Learning Center Coordinator at (719) 549-2271

Microcredentials

A microcredential is an umbrella term for several types of small-scale, skill-based, earned recognitions of proficiency in a designated competency or set of competencies that can be directly linked to career growth, career change, or professional development.

Microcredentials can be a combination of credit and non-credit offerings up to 9 credit hours.

Microcredentials have stand-alone value and may be stackable to earn a higher credential, including certificates or degrees.

Microcredentials must include assessment based on clearly defined standards to corroborate the skill, competency, or knowledge in its learning objectives.

A sharable digital badge is awarded upon successful completion of microcredential requirements, but the microcredential is not transcribed on a student's transcript.

Occhiato Student Center

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

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

The Occhiato Student Center is operated by the department of Auxiliary Services. Auxiliary Services is open from 8:00 a.m. to 5:00 p.m. Monday through Friday.

Identification Cards

All students enrolled must purchase an ID card also called the ThunderCard in the Auxiliary Services Office located in the Occhiato Student Center. The office is open Monday through Friday, from 8:00 a.m. to 5:00 p.m. Please contact Auxiliary Services office for the fee structure for new IDs, replacement IDs, 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 and sale items). The staff in the Auxiliary Services Office would be happy to give you more detailed information on these items.

Lost & 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 Student Center or contact us at (719) 549-2149.

Parking Permits

Parking on campus is managed by the Parking and Safety Office. If you have any questions, please call 719-549-2373.

Students who park their vehicles on campus must display a valid permit. Permits may be obtained online@csupueblo.thepermitstore.com (https://csupueblo.thepermitstore.com/). Each student should purchase either a University Village at Walking Stick, Resident or General Student permit, depending on his/her housing situation. Students may be eligible to charge a permit to their student account prior to financial aid disbursement. Student permits expire on August 31st every year.

All students needing to park a vehicle on campus are required to purchase an annual parking permit for their vehicle or motorcycle. Students are encouraged to purchase their parking permit at the beginning of each academic year (August) since parking rules are enforced year-round and enforced by University Public Safety. Permits can be purchased online at https://csupueblo.thepermitstore.com twenty-four hours a day, throughout the year. Students living in Crestone Hall, Culebra Hall, and Greenhorn Hall will be provided special parking lots as well as any other General Student Lots. Students living at University Village at Walking Stick must obtain a permit that allows them to park in the lots at University Village at Walking Stick as well as any other General Student Lots. Students are authorized to park between two white lines, indicating student parking.

Pack Center

Advising

First-Year Student Advising

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

Undeclared Academic Advising for Continuing and New Transfer Students

Pack Center Academic Success Coaches work with new transfer and continuing students who are undeclared, students changing their major and undeclared students interested in exploring majors and learning how majors connect to careers. The Success Coaches also assists students with course selection and registration. Undeclared advising is located in LARC 151. To schedule an appointment call: (719) 549-2584.

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 151 or call (719) 549-2584.

President's Leadership Program, Minor

The President's Leadership Program (PLP) at Colorado State University Pueblo is a competitive, cohort-based, multidisciplinary program with a strong experiential emphasis that leads to a minor in Leadership

Studies. PLP is housed in the Center for Honors and Leadership where cooperative programming allows students to minor in both Leadership Studies and Honors. The curriculum includes a core of five three-credit-hour courses and a minimum of three credit hours of approved elective courses selected from leadership-related courses offered on campus.

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

Potential scholars must be admitted to Colorado State University Pueblo as full-time students. Applications to the PLP must demonstrate academic excellence, leadership potential, and community service experience. Throughout their time in the program, PLP scholars may be eligible for scholarship consideration and/or financial assistance, based on merit and program participation.

President's Leadership Program Goals

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

Requirements for PLP Scholars

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

Specific Admission Requirements

The PLP focuses on first-time, full-time students who meet the minimum program admission requirements and must submit all of the components of the application, which includes:

- PLP Application Form (available online).
- 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.

All application information is available on the PLP website. Students who have been accepted into other college-level leadership programs, and wish to transfer into CSU Pueblo's PLP must apply through the Director. All applicants are interviewed by a PLP Selection team and are accepted at the discretion of this committee based on the admissions criteria.

Timelines

To meet the preferred deadline, application materials must be received by **March 1st**. The applications will be screened and interviews with the Selection Committee will be scheduled.

Student Learning Outcomes

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

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

Outcomes Assessment

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

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

members affiliate with the Association of Leadership Educators International Leadership Association when possible.

Specific Program Requirements

Student must be accepted to the President's Leadership Program PRIOR to beginning the coursework noted below.

Course	Title	Credits
Requirements		
PLP 160	Principles of Leadership	3
PLP 260	Leadership in Service Organizations	3
PLP 360	Applied Leadership	3
PLP 460	Working with Experienced Leaders	3
or PLP 489	Field Placement in Leadership	
CID 103	Speaking & Listening or an equivalent college-level public speaking course	3
Approved Electives (minimum)		3
Total Credits		**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 and new courses approved in other disciplines may also be approved on a case by case basis. Students should check with the PLP academic advisor for a current roster of specific additions. (In some cases, prerequisites or permission of instructor may be required for enrollment. See *Course Descriptions* section of catalog for information and requirements about all courses.)

Course	Title	Credits
BSAD 270	Business Communications	3
BSAD 302	Ethics in Business	3
EPER 436	Exercise Assessment & Prescription	3
MAE 370	Social Media & Online Strategies	3
MGMT 201	Principles of Management	3
MGMT 301	Organizational Behavior	3
PHIL 201	Classics in Ethics (GT-AH3)	3
PHIL 204	Critical Reasoning (GT-AH3)	3
PSYC 311	Theories Of Personality	3
PSYC 315	Industrial/Organizational Psychology	3
PSYC/SOC 352	Social Psychology	3
EPER 270	Outdoor Leadership I	2
EPER 350	Leadership & Ethics	3
EPER 370	Outdoor Leadership II	2
SOC 432	Organization Theory	3
PLP 491	Special Topics	3
NSG 451	Nursing Leadership and Issues Nursing Majors Only	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.

Rocky Mountain Public Media (RMPM)

Rocky Mountain Public Media is a statewide public broadcasting service; parent company of Rocky Mountain PBS (RMPBS), KUVO Jazz and THE DROP 303. Through a unique partnership, students in SoCaP and the Media & Entertainment program have an opportunity to pitch programming ideas, intern, and gain experience though public media.

Student & Exchange Visitor Program

Colorado State University is a SEVP-Certified school offering F visas to those interested in studying in the United States.

By providing a wide-variety of programs, services, and resources we strive to assist our international students with cultural adjustment, academic integration, professional growth, and internationalization of the surrounding Colorado communities.

CSU Pueblo also supports international students and scholars in the J visa classification. If you are a student or scholar on a J visa, please visit the Center for International Programs and Inclusive Excellence. (https://www.csupueblo.edu/center-for-international-programs-and-inclusive-excellence/international-programs/)

What is a Designated School Official (DSO)?

DSOs are international student's biggest resource that can answer your questions and guide you through the process of studying at CSU Pueblo. They can assist you with the following:

- Issuing an I-20
- Maintaining status
- Changing your education level
- Changing your major, program, or degree level
- Being absent from classes
- Requesting a program extension
- Requesting an internship
- Traveling outside the United States
- Working in the United States
- Applying for work

For questions or concerns, never hesitate to reach out to one of your CSU Pueblo DSOs or visit The Center to be direct to an on-campus DSO.

Internship Opportunities

Curricular Practical Training (CPT)

CPT permits eligible F-1 students work permission that is **integral** to their *major* field of study. "Integral" is understood by CSU Pueblo as being a *required* part of a student's curriculum to graduate. Not all major programs require internships for graduation. However, student's are able to substitute any 498, 598, 698, or 998 numbered course to fulfill any *major* 300/400-level requirement with advisor approval.

Requirements for applying for CPT are as follows, but not limited to:

- F-1 students must be maintaining status and have attended CSU Pueblo for one academic year (or be within 90 days of 1 year)

- Must be in a program requires an internship to graduate, or be registered for and have an accompanying audit showing the substitution of 498, 598, 698, or 998 for a major 300/400-level requirement
- Submit a CPT Request Form to a DSO within the Registrar's Office

Minor and certificate programs do not qualify for CPT.

Optional Practical Training (OPT)

There are two types of OPT available to F-1 students: **Pre-OPT** completed prior to program completion, and **Post-OPT** completed after graduation. OPT permits student work permission related to their *major* field of study; minors and certificates do not qualify for OPT.

OPT differs from CPT in-such that an internship is not required to fulfill graduations requirements, students are required to apply for a work permit though USCIS, and issued an Employment Authorization Document.

Requirements for applying for OPT are as follows, but not limited to:

- F-1 students must be maintaining status and have attended CSU Pueblo for one academic year (or be within 90 days of 1 year)
- Have not completed 12 more months of OPT at another institution
- Submit an OPT Request Form to a DSO within the Registrar's Office

STEM Optional Practical Training (STEM OPT)

STEM OPT is a 24-month extension that relates directly to an F-1 student's *major STEM* field of study. It is available to students with STEM degrees that completed their program of study, and completed 12 months of participation in post-OPT. For additional information regarding STEM OPT, please reach out to a CSU Pueblo DSO.

For a list of STEM programs, please refer to the Science, Technology, Engineering, and Mathematics (p. 386) section of this catalog.

What is SEVIS?

SEVIS is the Student & Exchange Visitor Information System that assists your DSO and the U.S. Department of Homeland Security (DHS) maintain information regarding your F-1 records including, but not limited to your I-20.

SEVIS is a critical tool to support you as an international student studying in the United States.

International Student Resources

Your DSO Team at CSU Pueblo

Tiaramarie Banham, PDSO

- 719-549-2900
- tiaramarie.banham@csupueblo.edu
- ADM 202

Aubrey Trujillo, DSO

- 719-549-2518
- aubrey.trujillo@csupueblo.edu
- ADM 202

Bonnie Fruland, DSO/RO

- 719-549-2332
- bonnie.fruland@csupueblo.edu
- OSC 104/106

Victoria Ruiz, DSO/ARO

- 719-549-2208
- victoria.ruiz@csupueblo.edu
- OSC 104/106

Kristin Olgin

- 719-549-2135
- kristin.olgin@csupueblo.edu
- ADM 212

The Center (https://www.csupueblo.edu/center-for-international-programs-and-inclusive-excellence/)

The Center for International Programs and Inclusive Excellence develops, promotes, and supports a welcoming environment for our diverse campus community by promoting equity, educational opportunities, global understanding, and intercultural awareness where all members are valued, supported, and respected.

Located in the Occhiato Student Center (OSC), room 104/106, the Center is a space for students to seek resources and find community. The Center staff maintains an open door policy, ensuring that every student has an opportunity to be heard and helped when needed.

Study in the States (https://studyinthestates.dhs.gov/)

Study in the States offers free government resources that explain the rules and regulations governing the nonimmigrant student process in the United States.

University Honors Minor Program

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

Program Goals

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

Specific Admission Requirements

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

1. **Incoming freshmen** to Colorado State University Pueblo are encouraged to apply for the Honors Program if they graduated high

school with a GPA of 3.8 or a minimum combined ACT score of 26, or a minimum combined SAT score of 1200. An index system determines final eligibility.

2. **Undergraduate transfer students and current CSU Pueblo undergraduate students** with a minimum grade point average of 3.5 are encouraged to apply for membership in the Honors Program. Two letters of recommendation from faculty members addressed to the Honors Program Director are also required.
3. **Admission of non-honors students** into honors courses is at the discretion of the faculty member teaching the course, with the approval of the Honors Director.

General Requirements

University Honors Minor Program students must maintain a 3.5 cumulative GPA at CSU Pueblo to remain in good standing in the program. Students who do not meet the requirement will receive a single one semester probation period permitted before they are removed from the program and forfeit program awards. Students must maintain appropriate Honors standards as well, and may also be removed from the program by the Honors Director, in consultation with the Honors Steering Committee, for failing to uphold other Program commitments (e.g., failing Honors courses, failing to attend Honors seminars, and inappropriate behavior on service-learning assignments). To receive program credit, each required Honors Minor course must be passed with a B (3.0) or better.

Expected Student Learning Outcomes

Honors Program students should be able to:

- Formulate and develop arguments with sufficient support, including reasoning, evidence, persuasive appeals, and proper attribution.
- Integrate knowledge from diverse perspectives, disciplines, and skill sets, both theoretical and applied, to hone them into arguments and/or strategies.
- Apply discipline-specific as well as cross-discipline-based knowledge to design, execute, and report on a specific problem-solving strategy.
- Make substantial leadership contributions to advancing personal and group work.
- Behave ethically as demonstrated in all performance categories, including classroom, extracurricular, community-based service learning, and independent research areas.

Outcomes Assessment

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

Specific Program Requirements

Course	Title	Credits
Required Courses		**12**
HONR 101	Foundations of Knowledge	2
HONR 201	Art and Science of Human Experience	2
HONR 310	Honors Group Project	3
HONR 481	Senior Honors Thesis/Project	3
Take the following course two times for credit:		
HONR 380	Honors Service-Learning	2
Electives	**In consultation with Honors Program Director**	**9**
Total Credits		**21**

University Library

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

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

Approximately 350,000 titles are available. The library's website provides access to over 100 online databases with reference information and journal articles, as well as web-based tutorials and help guides.

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

The University Library is located in the Library and Academic Resources Center (LARC) which opened in the spring 2011. The LARC includes technology study rooms and open computer labs that provide access to 100 desktop computers as well as laptops and iPads. Tutoring, advising, and other academic support services are also housed in the LARC.

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 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.

EXTENDED STUDIES

Colorado State University Pueblo Division of Extended Studies houses several academic and professional development opportunities for the university. Through collaboration with Academic Departments, a variety of courses and programs are offered, including Career & Professional Enhancement, CSU Pueblo Online, the Independent Study program, the External Degree program, High School Programs, the Teacher Education Program.

Both degree-seeking and non-degree seeking students may participate in Extended Studies programs. Only degree-seeking students are eligible for financial aid. Students desiring classification as degree-seeking students must fill out the External Degree Application or apply through the Office of Admissions. Credit courses taken through the Colorado State University Pueblo Extended Studies program have the same credit value as those conducted on campus and may be used in meeting the institutional residency requirement.

The primary aim of Extended Studies is to provide access opportunities for students. A variety of educational methods – classroom instruction, correspondence courses, online 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 vocational interests.

Extended Studies operates CSU Pueblo's Satellite Campus programs and course offerings at these locations: Pikes Peak State College in Colorado Springs, CO, Fort Carson Army Base, Arapahoe Community College Sturm Campus in Castle Rock, CO, and CSU Pueblo at Spanish Peaks in Walsenburg, CO.

Departments & Programs

- Career & Professional Enhancement (p. 91)
- CSU Pueblo Online (p. 91)
- External Degree Program (p. 91)
- High School Programs (p. 91)
- Independent Study Program (p. 92)
- Interdisciplinary Studies, Bachelor of Science (p. 92)
- Organizational Leadership, Bachelor of Applied Science (p. 93)
- Teacher Education Program (p. 94)

Academic Degree Programs

Undergraduate Programs

- Interdisciplinary Studies, Bachelor of Science (p. 92)
- Organizational Leadership, Bachelor of Applied Science (p. 93)

Certificates

- Character Education & Social Emotional Learning, Post-Baccalaureate Certificate (p. 128)

Career & Professional Enhancement

Through Career & Professional Enhancement, Extended Studies offers a variety of non-credit professional development and university credit courses that cater to the evolving and dynamic demands of business and industry, provide an opportunity for individuals to develop new career paths, or are simply for personal enrichment and growth.

These offerings, available for credit or non-credit Continuing Education Units (CEUs), can be implemented in many modalities including face to face, online, hybrid, and offsite locations. While some offerings are initiated by the University, individuals or community groups also can initiate programming through a request to Extended Studies by contacting the Academic and Industry Partnerships Specialist at 719-549-2198.

CSU Pueblo Online

CSU Pueblo Online offers undergraduate, graduate, and certificate programs in partnership with academic units at CSU Pueblo. The current online undergraduate academic programs include: Bachelor of Science in Construction Management, Bachelor of Science in Nursing (RN-BSN), Bachelor of Applied Science in Health Science and Administration, Bachelor of Science in Health Science, Bachelor of Applied Science in Organizational Leadership, and Bachelor of Science in Business Administration (Business Management and Agribusiness concentrations). The graduate degrees offered include: Master in Business Administration (MBA), Master of Science in Nursing (Nurse Educator or Nurse Manager and Leader), Master of Education, and Doctorate of Education (Ed.D). CSU Pueblo Online also offers a large selection of general education courses and certificates. Courses are offered asynchronous, in primarily eight-week modules and are available and accessible anywhere with internet access. CSU Pueblo Online offers a flat tuition rate per degree program, regardless of residency status. Online courses are not eligible for COF.

External Degree Program

The External Degree Program allows students to complete the entire degree via correspondence or web-based education. The degrees that are available are Bachelor of Science in Sociology, Bachelor of Arts in Sociology, Bachelor of Science in Criminology, Bachelor of Arts in Criminology, Bachelor of Science in Business Administration (Business Management major), Bachelor of Arts in Psychology, Bachelor of Science in Psychology, and Bachelor of Science in Interdisciplinary Studies. There are several minors or certificates that can be completed through this program. A student must be fully admitted into the university as a degree seeking student to receive a degree, minor or certificate. The courses for the External Degree Program are offered through the Independent Study Program.

High School Programs

Extended Studies also administers four programs in partnership with high schools throughout Colorado in accordance with Colorado Concurrent Enrollment legislation. Students must submit a specialized registration form, transcript from their high school, and ACT/SAT or other placement scores as needed to meet course requirements. Students enrolled in High School Programs are not eligible for Financial Aid; however, some students may receive financial assistance from their home high school or other external funding sources. 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.

The Dual Enrollment Senior-to-Sophomore (STS) program enrolls eligible high school students in dual credit courses which are delivered by highly qualified teachers on their high school campus.

The Concurrent Enrollment program enrolls eligible Colorado high school students in college credit courses on or off campus taught by university faculty. Students can participate in both STS and Concurrent Enrollment simultaneously where eligible. All credits in STS and Concurrent Enrollment count toward both high school graduation requirements and college degree attainment.

Accelerating Students through Concurrent Enrollment (ASCENT) and Teacher Recruitment Education and Preparation (TREP) are fifth-year senior programs students may participate in after their 12th grade year. Previous enrollment in STS or Concurrent Enrollment courses is required to be eligible for both programs. There is no tuition cost to the student in these programs and some schools may also cover the cost of fees and books.

Concurrent Enrollment, ASCENT and TREP students are assessed reduced campus fees and may access campus services such as the Student Recreation Center, athletic and Student Activities events, tutoring, and Student Wellness services. Some services may have age restrictions or have limited access commensurate with the amount of fees paid.

Students interested in any of these programs are encouraged to seek information and approval from their high school guidance counselor or from High School Programs staff.

Independent Study Program

Independent Study courses offer students the opportunity to complete print-based or digital correspondence courses, providing students flexibility and convenience. This correspondance (print-based) program is designed for individuals who seek higher education opportunities but are limited by digital or place-bound access. Students who utilize financial aid are required to complete the course in the semester in which they registered. Students who use alternative payment can complete the course at their own pace over a one-year period from the date of enrollment. Students can enroll at almost any time during the year and study where and when it is convenient. Courses follow the traditional semester schedule. Independent Study courses are taught by CSU Pueblo academically approved faculty/adjunct members and qualified subject-matter experts who possess both a post-graduate degree and college or university teaching experience in their field. All instructors and curriculum are reviewed and approved by the Department Chair and Dean of the respective departments/colleges. All courses in this program count towards the University's residency requirement.

Interdisciplinary Studies, Bachelor of Science

Extended Studies offers a Bachelor of Science (BS) in Interdisciplinary Studies. An Interdisciplinary Studies degree allows the student to choose more than one concentration area for their major and study the subjects and topics in which they are interested. It also allows students to combine science with other interests such as business, psychology, humanities, or social sciences. A major in Interdisciplinary Studies is a flexible degree program through which students can combine multiple majors for degree completion. This interdisciplinary approach teaches students a new range of skills for the workplace, encouraging them to make connections between different ideas and concepts as a way of bolstering the critical thinking, creative problem solving, and collaboration skills that are essential for success in their careers.

The Bachelor of Science in Interdisciplinary Studies is housed within the Division of Extended Studies. Extended Studies has developed a Faculty Advisory Board with a member from each college to represent the faculty and approve all curriculum requirements. Upon entry into the program, the student will work with the Extended Studies Academic Advisor to develop a program proposal, which includes a list of courses that meet the requirements of the degree, and develop a plan for completion.

Individual curriculum plans for degree completion will be approved by a Faculty Advisory Board member based on Academic Focus Areas under each college, along with the Dean of Extended Studies.

Specific Admission Requirements

This degree option is only available to students with 30 credits or more completed and who do not have an existing Bachelor degree. Per university requirements, no more than 60 credits can be transferred from a 2-year college or 90 credits from a 4-year college. A student must complete 30 credits at CSU Pueblo to receive the degree. If student has an AA or AS degree from a Colorado Community College, all General Education requirements are considered to be fulfilled; however, students must still complete the 120 credits required for graduation (see Admissions, Transfer Students section of this catalog). A student must complete 30 credits at CSU Pueblo to receive the degree.

Program Student Learning Outcomes

- Students will develop critical thinking, communication, organizational and problem-solving skills that allow them to see intellectual connections among various disciplinary fields.
- Students will develop linkages between their individualized intellectual inquiries and related areas in terms of contemporary challenges facing individuals, communities, and societies.
- Students will articulate their personal educational and professional goals focusing on existing and potential demand for the skills and knowledge they acquire in their degree program.
- Students will acquire an understanding of future opportunities for the program of study that they propose.

Specific Program Requirements

General Education (35 total credit hours):

Course	Title	Credits
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
Math		3
Humanities		9
History		3
Social Sciences		6
Science	Two courses from any science discipline including one lab hour in each.	8
Total Credits		**35**

Interdisciplinary Core (21 credit hours):

The degree must have 7 of the courses listed in the Interdisciplinary Core.

Course	Title	Credits
MAE 101	Media & Society (GT-SS3)	3
CS 101	Introduction to Chicano Studies (GT-HI1)	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	3

PSYC 100	General Psychology (GT-SS3)	3
PSYC 151	Human Development (GT-SS3)	3
MUS 118	Music Appreciation (GT-AH1)	3
POLS 101	American Government (GT-SS1)	3
SOC 101	Introduction to Sociology (GT-SS3)	3
MGMT 201	Principles of Management	3
CID 103	Speaking & Listening	3
or CID 221	Interpersonal Communication	
BSAD 270	Business Communications	3

Electives:

Course	Title	Credits
Upper Division Electives [1]		42
Electives [2]		22

[1] The upper division electives must total **42 credits, with** 300/400 level courses in a consistent major with a minimum of 15 credit hours in two consistent majors (major prefixes) making the total 30 credits in two different disciplines. The remaining 12 upper division credits can come from alternate major/prefixes. The upper division courses must have 2.0 in all courses.

[2] The remaining required credits (**22 credit hours**) are electives. This can include: Up to 6 credits of Prior Learning approved by the respective major department chair can be used towards the degree.

Core courses that are pre-determined as general education can be counted towards the core requirements and general education. All other courses cannot be dual counted for multiple graduation requirements.

A student cannot count credits for the Interdisciplinary Studies degree towards a second degree/major/minor.

Specific Graduation Requirements

A student must complete an online exit survey where he/she identifies how the two different academic focus areas meet the learning objectives associated with this degree. The survey will identify what core courses were completed towards the degree as well as identify the different academic focus areas and provide the opportunity for the student to articulate the academic and professional growth that occurred through the completion of the Interdisciplinary Studies degree.

Organizational Leadership, Bachelor of Applied Science

The Organizational Leadership Bachelor of Applied Science program is designed to enroll students holding a broad range of Associate degrees who are seeking a Bachelor's degree providing knowledge and expertise applicable to advancement in administration, leadership, management and supervision in a variety of organizations including business, government and non-profit organizations.

The curriculum includes coursework from across the leadership spectrum including literacy of basic organizational functions such as accounting, economics, communication technology, marketing as well as management of human resources, operations and projects. Leadership topics are brought into the curriculum both through targeted coursework and through leadership components included as part of related courses. The transfer and credit for prior learning policies are intended to give maximum acknowledgement and academic credit for prior education and experience, reducing the time and expense for completing the degree.

Specific Admission Requirements

1. Applicants must have completed an Associate's level degree such as an Associate of Arts (AA), Associate of Science (AS), Associate of General Studies (AGS) or an Associate of Applied Science (AAS) Degree from a regionally accredited Institution of higher education with 60 credits minimum.
2. If not completed as part of the required Associates degree students must complete a set of lower-division leveling courses which are a prerequisite foundation for upper-division BAS courses, and can be included as part of the open-electives.
3. Upper-division transfer credits counted towards the degree requirements must be transferred from a regionally accredited Institution of higher education.

Student Learning Outcomes

1. Develop skills and knowledge regarding leading and managing people in organizations.
2. Develop awareness of personal characteristics including your personality, leadership characteristics, information processing style and other relevant characteristics, biases and predispositions.
3. Recognize strategies for organizational success in a variety of environments, such as business, government and not-for-profit industries.
4. Build expertise for ensuring ethical organizational culture.
5. improve problem-solving and critical thinking knowledge and skills.
6. Practice implementation of leadership and management theory, philosophy and practice through coursework, case analysis, group/team activities, industry collaboration and academic simulation.

Specific Program Requirements

Program Overview [1]

Requirement	Credits
Transfer Coursework (Must have been awarded an Associate's degree)	60
General Education	13
Major Requirements (Upper Division)	30
Major Electives (10 credits must be upper division courses)	17
Total Credits	**120**

[1] Suggested leveling courses include: ACCT 101 Accounting for Non-Business Majors (3 c.h.), CID 103 Speaking & Listening (3 c.h.), MGMT 201 Principles of Management (3 c.h.), and MGMT 214 Introduction to Entrepreneurial Concepts (3 c.h.)

Required General Education

Course	Title	Credits
MATH 156	Introduction to Statistics (GT-MA1) Or equivalent course. Must have advisor approval.	3
Economics Must be lower division course.		3
English Must have advisor approval.		3

Natural Science with Lab	4
Total Credits	**13**

Major Requirements

The following upper-division courses are required for graduation:

Course	Title	Credits
BSAD 302	Ethics in Business	3
MGMT 301	Organizational Behavior	3
MGMT 311	Operations and Quality Management	3
MGMT 318	Human Resource Management	3
MGMT 368	Project Management	3
MGMT 480	Leadership & Organizational Change	3
MKTG 340	Principles of Marketing	3
PLP 350	Contemporary Leadership	3
PLP 360	Applied Leadership	3
PSYC 315	Industrial/Organizational Psychology	3
Total Credits		**30**

Required Electives

17 credits are required to fulfill degree requirements for this program. Of the 17 credits, 10 credits MUST be upper division. All credits must be approved by your advisor.

For more information on Credit for Prior Learning & Military Credit, please see the Academic Policies section of the catalog.

Specific Graduation Requirements

- Must have cumulative GPA at CSU Pueblo of 2.0 or higher

Teacher Education Program

In collaboration with the Teacher Education Department, Extended Studies offers graduate-level coursework for degree- and non-degree-seeking educators interested in professional development, recertification, and/or graduate degrees. This program partners with education organizations external to the University who offer graduate credit in curriculum and instruction, as well as a variety of disciplines. The credits are transcribed as ED 500 or ED 501. ED 500 is titled "Workshop" and is transcribed S/U for those courses that are designed as professional development and recertification. ED 501 is titled "Graduate Topics in Education" and is transcribed using A-F letter grades. ED 501 courses are eligible to count towards graduate credit/degrees, professional development, and/or recertification. All curricula and faculty are supervised by the Teacher Education Department. For more information about how this program connects with graduate degrees at CSU Pueblo, please see the Master of Education (M.Ed.) section of this catalog.

ACADEMIC & DEGREE PROGRAMS

Type of Credentials

Undergraduate (UG) Degree

- Credits: 120+
- Admitted to University: Yes
- Product: Diploma
- Residency Requirement: 30 credit hours
- GPA Requirement: Yes

Graduate (GR) Degree

- Credits: 30+
- Admitted to University: Yes
- Product: Diploma
- Residency Requirement: All but 6 credit hours
- GPA Requirement: Yes

Minor

- Credits:18+
- Admitted to University: Yes with Undergraduate Degree
- Product: Transcripted
- Residency Requirement: Half
- GPA Requirement: Yes

Undergraduate (UG) Certificate

- Credits: 9+
- Admitted to University: Yes
- Product: Diploma
- Residency Requirement: Half
- GPA Requirement: Yes

Microcredential (p. 85)

- Credits: 0-9 plus Continuing Education Units (CEU)
- Admitted to University: No
- Product: Digital Badge
- Residency Requirement: Half
- GPA Requirement: Varies

Associate's (p. 82)

- Credits: 70
- Admitted to University: Yes
- Product: Diploma
- Residency Requirement: 18 credit hours
- GPA Requirement: Yes

Undergraduate Degree Programs

Program	Department	College	3+2	Available Online
Accounting, Bachelor of Science in Business Administration (p. 506)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)		
Art Creative Media, Bachelor of Arts (p. 238)	Art Creative Media (p. 233)	College of Humanities, Arts, and Social Sciences (p. 232)		
Art Creative Media: Art History Concentration, Bachelor of Arts (p. 240)	Art Creative Media (p. 233)	College of Humanities, Arts, and Social Sciences (p. 232)		
Art Creative Media: Creative Media Concentration, Bachelor of Fine Arts (p. 241)	Art Creative Media (p. 233)	College of Humanities, Arts, and Social Sciences (p. 232)		
Art Creative Media: K-12 Teacher Preparation Concentration, Bachelor of Arts (p. 242)	Art Creative Media (p. 233)	College of Humanities, Arts, and Social Sciences (p. 232)		
Art Creative Media: Studio Arts Concentration, Bachelor of Fine Arts (p. 243)	Art Creative Media (p. 233)	College of Humanities, Arts, and Social Sciences (p. 232)		
Athletic Training 3+2 Program, Bachelor of Science/Master of Science (p. 207)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)	(3+2 Program)	
Biochemistry 3+2 Plan, Joint Bachelor of Science/Master of Science (p. 422)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)	(3+2 Program)	

Biology 3+2 Program, Bachelor of Science/Master of Science (p. 401)	Biology (p. 387)	College of Science, Technology, Engineering, and Mathematics (p. 386)	(3+2 Program)	
Biology/Chemistry Double Major, Bachelor of Science (p. 405)	Biology (p. 387)	College of Science, Technology, Engineering, and Mathematics (p. 386)		
Biology: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 406)	Biology (p. 387)	College of Science, Technology, Engineering, and Mathematics (p. 386)		
Biology: Basic Biology Concentration, Bachelor of Science (p. 407)	Biology (p. 387)	College of Science, Technology, Engineering, and Mathematics (p. 386)		
Biology: Biomedical Sciences Concentration, Bachelor of Science (p. 408)	Biology (p. 387)	College of Science, Technology, Engineering, and Mathematics (p. 386)		
Biology: Cellular Molecular Biosciences Concentration, Bachelor of Science (p. 409)	Biology (p. 387)	College of Science, Technology, Engineering, and Mathematics (p. 386)		
Biology: Environmental Biosciences Concentration, Bachelor of Science (p. 410)	Biology (p. 387)	College of Science, Technology, Engineering, and Mathematics (p. 386)		
Business Administration 3+2 Program, Integrated Bachelor of Science/Master of Business Administration (p. 508)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	(3+2 Program)	(Offered online)
Business Administration 3+2 Program, Integrated Computer Information Systems, Bachelor of Science/Master of Business Administration (p. 509)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	(3+2 Program)	
Business Administration 3+2 Program, Integrated Construction Management, Bachelor of Science/Master of Business Administration (p. 510)	Hasan School of Business (p. 489)	College of Science, Technology, Engineering, and Mathematics (p. 386)	(3+2 Program)	(Offered online)
Business Administration 3+2 Program, Non-Integrated BS, BA/MBA (p. 512)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	(3+2 Program)	
Business Administration 3+2 Program, Non-Integrated BS,BA/MBA in Business Administration: Public Management Concentration (p. 512)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	(3+2 Program)	(Offered online)
Business Management, Bachelor of Science in Business Administration (p. 516)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)		(Offered online)
Business Management: Agribusiness Concentration, Bachelor of Science in Business Administration (p. 518)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)		

Business Management: Cannabis Industry Management Concentration, Bachelor of Science in Business Administration (p. 519)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)		(Offered online)
Business Management: Information Technology Concentration, Bachelor of Science in Business Administration (p. 521)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)		
Business Management: Organizational Risk Security Management Concentration, Bachelor of Science in Business Administration (p. 522)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)		
Business Management: Sports Industry Management Concentration, Bachelor of Science in Business Administration (p. 524)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)		
Cannabis Biology Chemistry 3+2 Plan, Joint Bachelor of Science/Master of Science (p. 426)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)	(3+2 Program)	
Cannabis Biology Chemistry: Analytical Concentration, Bachelor of Science (p. 430)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)		
Cannabis Biology Chemistry: Hemp Agriculture Concentration, Bachelor of Science (p. 430)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)		
Cannabis Biology Chemistry: Natural Products Concentration, Bachelor of Science (p. 431)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)		
Chemistry 3+2 Plan, Joint Bachelor of Science/Master of Science (p. 432)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)	(3+2 Program)	
Chemistry/Biology Double Major, Bachelor of Science (p. 436)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)		
Chemistry: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 437)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)		
Chemistry: ACS Certified Concentration, Bachelor of Science (p. 438)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)		
Chemistry: Basic Chemistry Concentration, Bachelor of Science (p. 439)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)		
Chemistry: Biochemistry Concentration, Bachelor of Science (p. 440)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)		

Chemistry: Environmental Chemistry Concentration, Bachelor of Science (p. 442)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Civil Engineering Technology, Bachelor of Science in Civil Engineering Technology (p. 447)	Engineering Technology Construction Management (p. 443)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Civil Engineering, Bachelor of Science in Civil Engineering (p. 478)	Engineering Technology Construction Management (p. 443)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Computer Information Systems, Bachelor of Science (p. 525)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	
Computer Information Systems: Cyber Security Concentration, Bachelor of Science (p. 527)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	
Computer Information Systems: Data Analytics Concentration, Bachelor of Science (p. 528)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	
Computer Information Systems: Software Development Concentration, Bachelor of Science (p. 529)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	
Construction Management, Bachelor of Science (p. 448)	Engineering Technology Construction Management (p. 443)	College of Science, Technology, Engineering, and Mathematics (p. 386)	(Offered online)
Criminology, Bachelor of Arts (p. 373)	Sociology, Criminology, Anthropology (p. 361)	College of Humanities, Arts, and Social Sciences (p. 232)	(Offered online)
Criminology, Bachelor of Science (p. 374)	Sociology, Criminology, Anthropology (p. 361)	College of Humanities, Arts, and Social Sciences (p. 232)	(Offered online)
Criminology/Sociology Double Major, Bachelor of Arts (p. 375)	Sociology, Criminology, Anthropology (p. 361)	College of Humanities, Arts, and Social Sciences (p. 232)	
Criminology/Sociology Double Major, Bachelor of Science (p. 376)	Sociology, Criminology, Anthropology (p. 361)	College of Humanities, Arts, and Social Sciences (p. 232)	
Criminology: Community Engagement Concentration, Bachelor of Science (p. 378)	Sociology, Criminology, Anthropology (p. 361)	College of Humanities, Arts, and Social Sciences (p. 232)	
Early Childhood Education, Bachelor of Science (p. 128)	School of Education (p. 112)	College of Health Education (p. 110)	
Early Childhood Education: K-3 Teacher Preparation Concentration, Bachelor of Science (p. 129)	School of Education (p. 112)	College of Health Education (p. 110)	
Economics, Bachelor of Science in Business Administration (p. 531)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	

Economics: Finance Concentration, Bachelor of Science in Business Administration (p. 533)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)		
Elementary Education: K-6 Teacher Preparation Concentration, Bachelor of Science (p. 176)	School of Education (p. 112)	College of Health Education (p. 110)		
Engineering 3+2 Program, Bachelor of Science/Master of Science (p. 479)	School of Engineering (p. 468)	College of Science, Technology, Engineering, and Mathematics (p. 386)	(3+2 Program)	
Engineering, Bachelor of Science in Engineering: Mechatronics Specialization (p. 480)	School of Engineering (p. 468)	College of Science, Technology, Engineering, and Mathematics (p. 386)		
English, Bachelor of Arts (p. 263)	English World Language (p. 247)	College of Humanities, Arts, and Social Sciences (p. 232)		
English: 7-12 Teacher Preparation Concentration, Bachelor of Arts (p. 265)	English World Language (p. 247)	College of Humanities, Arts, and Social Sciences (p. 232)		
English: Creative Writing Concentration, Bachelor of Arts (p. 266)	English World Language (p. 247)	College of Humanities, Arts, and Social Sciences (p. 232)		
Exercise Science, Physical Education, Recreation: General Exercise Science Concentration, Bachelor of Science (p. 210)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)		
Exercise Science, Physical Education, Recreation: K-12 Physical Education Teacher Preparation Concentration, Bachelor of Science (p. 212)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)		
Exercise Science, Physical Education, Recreation: K-12 Teacher Preparation Concentration 3+2 Plan, Integrated Bachelor of Science/Master of Education: Health Physical Education Concentration (p. 214)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)	(3+2 Program)	
Exercise Science, Physical Education, Recreation: Recreation Concentration, Bachelor of Science (p. 217)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)		
Exercise Science, Physical Education, Recreation: Strength Conditioning Concentration, Bachelor of Science (p. 218)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)		
External Degree Program (p. 91)	Extended Studies (p. 91)	Extended Studies (p. 91)		(Offered online)
Gaming Immersive Media, Bachelor of Fine Arts (p. 273)	Humanities, Arts, Social Sciences (p. 344)	College of Humanities, Arts, and Social Sciences (p. 232)		

Health Science Administration, Bachelor of Applied Science (p. 220)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)		(Offered online)
Health Sciences General Concentration 3+2 Plan, Integrated Bachelor of Science/Master of Business Administration: Healthcare Administration Concentration (p. 534)	Hasan School of Business (p. 489)	College of Health Education (p. 110)	(3+2 Program)	(Offered online)
Health Sciences: General Health Science Concentration, Bachelor of Science (p. 221)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)		(Offered online)
Health Sciences: Health Coaching Concentration, Bachelor of Science (p. 223)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)		
Health Sciences: Pre-Accelerated Nursing Concentration, Bachelor of Science (p. 224)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)		
Health Sciences: Pre-Athletic Training Concentration, Bachelor of Science (p. 225)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)		
Health Sciences: Pre-Nursing Concentration (p. 226)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)		
Health Sciences: Public Health Concentration, Bachelor of Science (p. 228)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)		
History, Bachelor of Arts (p. 282)	History, Political Science, Geography, Philosophy (p. 274)	College of Humanities, Arts, and Social Sciences (p. 232)		
History, Bachelor of Science (p. 283)	History, Political Science, Geography, Philosophy (p. 274)	College of Humanities, Arts, and Social Sciences (p. 232)		
History: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 285)	History, Political Science, Geography, Philosophy (p. 274)	College of Humanities, Arts, and Social Sciences (p. 232)		
Humanities Social Sciences, Bachelor of Arts (p. 293)	Humanities, Arts, Social Sciences (p. 344)	College of Humanities, Arts, and Social Sciences (p. 232)		
Industrial Engineering, Bachelor of Science in Industrial Engineering (p. 483)	School of Engineering (p. 468)	College of Science, Technology, Engineering, and Mathematics (p. 386)		
Interdisciplinary Studies, Bachelor of Science (p. 92)	Extended Studies (p. 91)	Extended Studies (p. 91)		(Offered online)
Marketing, Bachelor of Science in Business Administration (p. 536)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)		
Math/Physics Double Major, Bachelor of Science (p. 459)	Math Physics (p. 452)	College of Science, Technology, Engineering, and Mathematics (p. 386)		

Mathematics, Bachelor of Arts (p. 460)	Math Physics (p. 452)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Mathematics, Bachelor of Science (p. 461)	Math Physics (p. 452)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Mathematics: 7-12 Teacher Preparation Concentration, Bachelor of Arts (p. 462)	Math Physics (p. 452)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Mathematics: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 463)	Math Physics (p. 452)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Media Entertainment: Media Entertainment Production Concentration, Bachelor of Science (p. 301)	Media Entertainment (p. 294)	College of Humanities, Arts, and Social Sciences (p. 232)	
Media Entertainment: Media, Entertainment, Arts Management Concentration, Bachelor of Science (p. 303)	Media Entertainment (p. 294)	College of Humanities, Arts, and Social Sciences (p. 232)	
Media Entertainment: Multimedia Journalism Storytelling Concentration, Bachelor of Science (p. 306)	Media Entertainment (p. 294)	College of Humanities, Arts, and Social Sciences (p. 232)	
Media Entertainment: Sports ESports Media Concentration, Bachelor of Science (p. 308)	Media Entertainment (p. 294)	College of Humanities, Arts, and Social Sciences (p. 232)	
Media Entertainment: Strategic Communication Concentration, Bachelor of Science (p. 310)	Media Entertainment (p. 294)	College of Humanities, Arts, and Social Sciences (p. 232)	
Middle School Mathematics: 6-8 Teacher Preparation Concentration, Bachelor of Science (p. 184)	School of Education (p. 112)	College of Health Education (p. 110)	
Music, Bachelor of Arts (p. 334)	Music (p. 314)	College of Humanities, Arts, and Social Sciences (p. 232)	
Music: K-12 Teacher Preparation Concentration, Bachelor of Arts (p. 337)	Music (p. 314)	College of Humanities, Arts, and Social Sciences (p. 232)	
Music: Music Performance Concentration, Bachelor of Arts (p. 340)	Music (p. 314)	College of Humanities, Arts, and Social Sciences (p. 232)	
Nursing, Bachelor of Science in Nursing (p. 550)	School of Nursing (p. 539)	School of Nursing (p. 539)	(Offered online)
Organizational Leadership, Bachelor of Applied Science (p. 93)	Extended Studies (p. 91)	Extended Studies (p. 91)	(Offered online)
Physics, Bachelor of Science (p. 464)	Math Physics (p. 452)	College of Science, Technology, Engineering, and Mathematics (p. 386)	

Physics: 7-12 Physical Science Teacher Preparation Concentration, Bachelor of Science (p. 465)	Math Physics (p. 452)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Physics: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 467)	Math Physics (p. 452)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Political Science, Bachelor of Arts (p. 287)	History, Political Science, Geography, Philosophy (p. 274)	College of Humanities, Arts, and Social Sciences (p. 232)	
Political Science, Bachelor of Science (p. 288)	History, Political Science, Geography, Philosophy (p. 274)	College of Humanities, Arts, and Social Sciences (p. 232)	
Political Science: 7-12 Teacher Preparation Concentration, Bachelor of Arts (p. 290)	History, Political Science, Geography, Philosophy (p. 274)	College of Humanities, Arts, and Social Sciences (p. 232)	
Political Science: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 291)	History, Political Science, Geography, Philosophy (p. 274)	College of Humanities, Arts, and Social Sciences (p. 232)	
Psychology, Bachelor of Arts (p. 350)	Psychology (p. 345)	College of Humanities, Arts, and Social Sciences (p. 232)	
Psychology, Bachelor of Science (p. 351)	Psychology (p. 345)	College of Humanities, Arts, and Social Sciences (p. 232)	
Social Work, Bachelor of Social Work (p. 358)	Social Work (p. 353)	College of Humanities, Arts, and Social Sciences (p. 232)	
Sociology, Bachelor of Arts (p. 379)	Sociology, Criminology, Anthropology (p. 361)	College of Humanities, Arts, and Social Sciences (p. 232)	(Offered online)
Sociology, Bachelor of Science (p. 380)	Sociology, Criminology, Anthropology (p. 361)	College of Humanities, Arts, and Social Sciences (p. 232)	(Offered online)
Sociology: Community Engagement Concentration, Bachelor of Arts (p. 382)	Sociology, Criminology, Anthropology (p. 361)	College of Humanities, Arts, and Social Sciences (p. 232)	
Sociology: Community Engagement Concentration, Bachelor of Science (p. 383)	Sociology, Criminology, Anthropology (p. 361)	College of Humanities, Arts, and Social Sciences (p. 232)	
Wildlife Natural Resources: Aquatic Concentration, Bachelor of Science (p. 411)	Biology (p. 387)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Wildlife Natural Resources: Terrestrial Concentration, Bachelor of Science (p. 412)	Biology (p. 387)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
World Languages-Spanish, Bachelor of Arts (p. 268)	English World Language (p. 247)	College of Humanities, Arts, and Social Sciences (p. 232)	
World Languages-Spanish: K-12 Teacher Preparation Concentration, Bachelor of Arts (p. 269)	English World Language (p. 247)	College of Humanities, Arts, and Social Sciences (p. 232)	

World Languages-Spanish: Media Entertainment Concentration, Bachelor of Arts (p. 271)	English World Language (p. 247)	College of Humanities, Arts, and Social Sciences (p. 232)
World Languages-Spanish: Translation Studies Concentration, Bachelor of Arts (p. 272)	English World Language (p. 247)	College of Humanities, Arts, and Social Sciences (p. 232)

Graduate Degree Programs

Program	Department	College	Available Online
Athletic Training, Master of Science (p. 209)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)	
Biochemistry, Master of Science (p. 424)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Biology, Master of Science (p. 403)	Biology (p. 387)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Business Administration, Master of Business Administration (p. 513)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	(Offered online)
Business Administration: Cybersecurity Concentration, Master of Business Administration (p. 515)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	
Business Administration: Healthcare Administration Concentration, Master of Business Administration (p. 515)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	(Offered online)
Business Administration: Public Management Concentration, Masters of Business Administration (p. 516)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	(Offered online)
Cannabis Biology Chemistry, Master of Science (p. 427)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Chemistry, Master of Science (p. 434)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Education: Art Education Concentration, Master of Education (p. 131)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Curriculum Instruction Concentration, Master of Education (p. 134)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Early Childhood Education Concentration, Master of Education (p. 137)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Early Learning Concentration, Master of Education (p. 140)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Educational Leadership Concentration, Master of Education (p. 143)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: English Concentration, Master of Education (p. 146)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)

Education: Gifted Education Concentration, Master of Education (p. 149)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Health Physical Education Concentration, Master of Education (p. 151)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Instructional Technology Concentration, Master of Education (p. 154)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Linguistically Diverse Concentration, Master of Education (p. 157)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Music Education Concentration, Master of Education (p. 160)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Reading, Language, Literacy Concentration, Master of Education (p. 164)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Space Studies for Educators Concentration, Master of Education (p. 166)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: Special Education Concentration, Master of Education (p. 169)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Education: World Language Concentration, Master of Education (p. 172)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Industrial Systems Engineering, Master of Science (p. 482)	School of Engineering (p. 468)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Mechatronics Engineering, Master of Science (p. 485)	School of Engineering (p. 468)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Nursing: Adult/Gerontology Acute Care Nurse Practitioner Concentration, Master of Science (p. 556)	School of Nursing (p. 539)	School of Nursing (p. 539)	
Nursing: Adult/Gerontology Acute Care/Family Nurse Practitioner Concentration, Master of Science (p. 561)	School of Nursing (p. 539)	School of Nursing (p. 539)	
Nursing: Nurse Educator Concentration, Master of Science (p. 565)	School of Nursing (p. 539)	School of Nursing (p. 539)	(Offered online)
Nursing: Nurse Manager Leader Concentration, Master of Science (p. 566)	School of Nursing (p. 539)	School of Nursing (p. 539)	(Offered online)
Nursing: Psychiatric-Mental Health Nurse Practitioner Concentration, Master of Science (p. 570)	School of Nursing (p. 539)	School of Nursing (p. 539)	
Social Work, Masters of Social Work (p. 360)	Social Work (p. 353)	College of Humanities, Arts, and Social Sciences (p. 232)	

Doctoral Degree Programs

Program	Department	College	Available Online
Educational Leadership, Doctor of Education (p. 175)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Nursing: Adult/Gerontology Acute Care Nurse Practitioner Concentration, Doctor of Nursing Practice (p. 555)	School of Nursing (p. 539)	School of Nursing (p. 539)	
Nursing: Adult/Gerontology Acute Care/Family Nurse Practitioner Concentration, Doctor of Nursing Practice (p. 559)	School of Nursing (p. 539)	School of Nursing (p. 539)	
Nursing: Population Health Concentration, Doctor of Nursing Practice (p. 567)	School of Nursing (p. 539)	School of Nursing (p. 539)	(Offered online)
Nursing: Psychiatric-Mental Health Nurse Practitioner Concentration, Doctor of Nursing Practice (p. 568)	School of Nursing (p. 539)	School of Nursing (p. 539)	(Offered online)

Minor Programs

Program	Department	College	Available Online
Accounting, Minor (p. 508)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	
Anthropology, Minor (p. 372)	Sociology, Criminology, Anthropology (p. 361)	College of Humanities, Arts, and Social Sciences (p. 232)	
Art Creative Media, Minor (p. 239)	Art Creative Media (p. 233)	College of Humanities, Arts, and Social Sciences (p. 232)	
Biology, Minor (p. 404)	Biology (p. 387)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Business Administration, Minor (p. 514)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	
Cannabis Studies, Minor (p. 244)	Humanities, Arts, Social Sciences (p. 344)	College of Humanities, Arts, and Social Sciences (p. 232)	
Chemistry, Minor (p. 435)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Chicano/a Studies, Minor (p. 245)	Humanities, Arts, Social Sciences (p. 344)	College of Humanities, Arts, and Social Sciences (p. 232)	
Civil Engineering, Minor (p. 448)	Engineering Technology Construction Management (p. 443)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Coaching, Minor (p. 210)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)	
Composition/Music Theory, Minor (p. 334)	Music (p. 314)	College of Humanities, Arts, and Social Sciences (p. 232)	
Computational Mathematics, Minor (p. 459)	Math Physics (p. 452)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Computer Information Systems, Minor (p. 527)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	
Construction Management, Minor (p. 450)	Engineering Technology Construction Management (p. 443)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Creative Wellness, Minor (p. 349)	Psychology (p. 345)	College of Humanities, Arts, and Social Sciences (p. 232)	

Creative Writing, Minor (p. 262)	English World Language (p. 247)	College of Humanities, Arts, and Social Sciences (p. 232)
Cyber Security, Minor (p. 530)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)
Data Analytics, Minor (p. 531)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)
Economics, Minor (p. 533)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)
Engineering, Minor (p. 481)	School of Engineering (p. 468)	College of Science, Technology, Engineering, and Mathematics (p. 386)
English, Minor (p. 264)	English World Language (p. 247)	College of Humanities, Arts, and Social Sciences (p. 232)
Exercise Science, Minor (p. 210)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)
Finance, Minor (p. 534)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)
Fitness Recreational Sports Management, Minor (p. 219)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)
Health Coaching, Minor (p. 220)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)
History, Minor (p. 284)	History, Political Science, Geography, Philosophy (p. 274)	College of Humanities, Arts, and Social Sciences (p. 232)
Humanities Social Sciences, Minor (p. 293)	Humanities, Arts, Social Sciences (p. 344)	College of Humanities, Arts, and Social Sciences (p. 232)
Industrial Engineering, Minor (p. 484)	School of Engineering (p. 468)	College of Science, Technology, Engineering, and Mathematics (p. 386)
Jazz Studies, Minor (p. 334)	Music (p. 314)	College of Humanities, Arts, and Social Sciences (p. 232)
Legal Studies, Minor (p. 286)	History, Political Science, Geography, Philosophy (p. 274)	College of Humanities, Arts, and Social Sciences (p. 232)
Marketing, Minor (p. 537)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)
Mathematics, Minor (p. 462)	Math Physics (p. 452)	College of Science, Technology, Engineering, and Mathematics (p. 386)
Media Entertainment, Minor (p. 300)	Media Entertainment (p. 294)	College of Humanities, Arts, and Social Sciences (p. 232)
Military Science, Minor (p. 312)	Humanities, Arts, Social Sciences (p. 344)	College of Humanities, Arts, and Social Sciences (p. 232)
Museum Studies, Minor (p. 314)	Humanities, Arts, Social Sciences (p. 344)	College of Humanities, Arts, and Social Sciences (p. 232)
Music, Minor (p. 337)	Music (p. 314)	College of Humanities, Arts, and Social Sciences (p. 232)
Music, Sound, Audio Production, Minor (p. 344)	Humanities, Arts, Social Sciences (p. 344)	College of Humanities, Arts, and Social Sciences (p. 232)
Non Profit Administration, Minor (p. 344)	Humanities, Arts, Social Sciences (p. 344)	College of Humanities, Arts, and Social Sciences (p. 232)
Organ Performance Studies, Minor (p. 343)	Music (p. 314)	College of Humanities, Arts, and Social Sciences (p. 232)
Outdoor Recreation, Minor (p. 229)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)
Philosophy Religious Studies, Minor (p. 286)	History, Political Science, Geography, Philosophy (p. 274)	College of Humanities, Arts, and Social Sciences (p. 232)
Physics, Minor (p. 465)	Math Physics (p. 452)	College of Science, Technology, Engineering, and Mathematics (p. 386)
Piano Pedagogy, Minor (p. 343)	Music (p. 314)	College of Humanities, Arts, and Social Sciences (p. 232)

Political Science, Minor (p. 289)	History, Political Science, Geography, Philosophy (p. 274)	College of Humanities, Arts, and Social Sciences (p. 232)	
Psychology, Minor (p. 353)	Psychology (p. 345)	College of Humanities, Arts, and Social Sciences (p. 232)	
Public Health, Minor (p. 230)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)	
Reading, Minor (p. 185)	School of Education (p. 112)	College of Health Education (p. 110)	
Recreation, Minor (p. 230)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)	
Secondary K-12 Education, Minor (p. 185)	School of Education (p. 112)	College of Health Education (p. 110)	
Sociology, Minor (p. 381)	Sociology, Criminology, Anthropology (p. 361)	College of Humanities, Arts, and Social Sciences (p. 232)	
Spanish, Minor (p. 267)	English World Language (p. 247)	College of Humanities, Arts, and Social Sciences (p. 232)	
Supervisory Management, Minor (p. 538)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	
Sustainability, Minor (p. 487)	School of Engineering (p. 468)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Tourism, Minor (p. 230)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)	
Veteran Studies, Minor (p. 385)	Humanities, Arts, Social Sciences (p. 344)	College of Humanities, Arts, and Social Sciences (p. 232)	
Women's Studies, Minor (p. 384)	Sociology, Criminology, Anthropology (p. 361)	College of Humanities, Arts, and Social Sciences (p. 232)	

Undergraduate Certificate Programs

Program	Department	College	Available Online
Advanced Spanish for the Health Professions, Certificate (p. 261)	English World Language (p. 247)	College of Humanities, Arts, and Social Sciences (p. 232)	
Basic Spanish for the Health Professions, Certificate (p. 262)	English World Language (p. 247)	College of Humanities, Arts, and Social Sciences (p. 232)	
Cannabis Biology Chemistry, Certificate (p. 427)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Colorado Studies, Certificate (p. 282)	History, Political Science, Geography, Philosophy (p. 274)	College of Humanities, Arts, and Social Sciences (p. 232)	
Construction Procurement, Certificate (p. 450)	Engineering Technology Construction Management (p. 443)	College of Science, Technology, Engineering, and Mathematics (p. 386)	(Offered online)
Construction Project Manager, Certificate (p. 451)	Engineering Technology Construction Management (p. 443)	College of Science, Technology, Engineering, and Mathematics (p. 386)	(Offered online)
Construction Safety, Law, Management, Certificate (p. 451)	Engineering Technology Construction Management (p. 443)	College of Science, Technology, Engineering, and Mathematics (p. 386)	(Offered online)
Creative Industry Essentials, Certificate (p. 246)	Humanities, Arts, Social Sciences (p. 344)	College of Humanities, Arts, and Social Sciences (p. 232)	
Data Analytics, Certficate (p. 459)	Math Physics (p. 452)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Diversity Studies, Certificate (p. 246)	Humanities, Arts, Social Sciences (p. 344)	College of Humanities, Arts, and Social Sciences (p. 232)	(Offered online)

Estimating Planning Construction Costs, Certificate (p. 450)	Engineering Technology Construction Management (p. 443)	College of Science, Technology, Engineering, and Mathematics (p. 386)	(Offered online)
Foundations of Business, Certificate (p. 534)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	
Geography, Certificate (p. 282)	History, Political Science, Geography, Philosophy (p. 274)	College of Humanities, Arts, and Social Sciences (p. 232)	
Health Fitness Certification for the Department of Corrections (p. 219)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)	
Jake Jabs Certificate in Professional Entrepreneurship (p. 536)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	
Lean Green Belt, Certificate (p. 485)	School of Engineering (p. 468)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
NSA-Designated Institution Certificate in Cyber Security Defense (p. 537)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	
Nutritional Psychology, Certificate (p. 350)	Psychology (p. 345)	College of Humanities, Arts, and Social Sciences (p. 232)	
Recreation Leadership, Certificate (p. 230)	School of Health Science Human Movement (p. 191)	College of Health Education (p. 110)	
Six Sigma Green Belt, Certificate (p. 486)	School of Engineering (p. 468)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Surveying Modeling, Certificate (p. 451)	Engineering Technology Construction Management (p. 443)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Sustainability, Certificate (p. 487)	School of Engineering (p. 468)	College of Science, Technology, Engineering, and Mathematics (p. 386)	

Graduate & Post-Baccalaureate Certificate Programs

Program	Department	College	Available Online
Cannabis Biology Chemistry, Post-Baccalaureate Certificate (p. 429)	Chemistry (p. 413)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
Character Education Social Emotional Learning, Post-Baccalaureate Certificate (p. 128)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Early Childhood Education, Post-Baccalaureate Certificate (p. 129)	School of Education (p. 112)	College of Health Education (p. 110)	
Education: Principal Licensure, Post-Baccalaureate Certificate (p. 163)	School of Education (p. 112)	College of Health Education (p. 110)	(Offered online)
Graduate Certificate in Railroad Engineering, Post-Baccalaureate Certificate (p. 481)	School of Engineering (p. 468)	College of Science, Technology, Engineering, and Mathematics (p. 386)	
K-12 Art, Post-Baccalaureate Certificate (p. 180)	School of Education (p. 112)	College of Health Education (p. 110)	
K-12 Culturally Linguistically Diverse Education, Post-Baccalaureate Certificate (p. 181)	School of Education (p. 112)	College of Health Education (p. 110)	
K-12 Instructional Technology, Post-Baccalaureate Certificate (p. 181)	School of Education (p. 112)	College of Health Education (p. 110)	

K-12 Music, Post-Baccalaureate Certificate (p. 181)	School of Education (p. 112)	College of Health Education (p. 110)	
K-12 Physical Education, Post-Baccalaureate Certificate (p. 182)	School of Education (p. 112)	College of Health Education (p. 110)	
K-12 Special Education Generalist, Post-Baccalaureate Certificate (p. 182)	School of Education (p. 112)	College of Health Education (p. 110)	
K-12 World Languages - Spanish, Post-Baccalaureate Certificate (p. 182)	School of Education (p. 112)	College of Health Education (p. 110)	
K-6 Elementary Education, Post-Baccalaureate Certificate (p. 183)	School of Education (p. 112)	College of Health Education (p. 110)	
Middle School (6-8) Mathematics, Post-Baccalaureate Certificate (p. 183)	School of Education (p. 112)	College of Health Education (p. 110)	
Nurse Educator, Post Masters Certification (p. 549)	School of Nursing (p. 539)	School of Nursing (p. 539)	(Offered online)
Nurse Educator, Post-Baccalaureate Certificate (p. 550)	School of Nursing (p. 539)	School of Nursing (p. 539)	(Offered online)
Nursing: Adult/Gerontology Acute Care Nurse Practitioner, Post Masters Certification (p. 558)	School of Nursing (p. 539)	School of Nursing (p. 539)	
Nursing: Adult/Gerontology Acute Care/Family Nurse Practitioner, Post Masters Certification (p. 562)	School of Nursing (p. 539)	School of Nursing (p. 539)	
Nursing: Psychiatric-Mental Health Nurse Practitioner, Post Masters Certification (p. 571)	School of Nursing (p. 539)	School of Nursing (p. 539)	
Secondary English, Post-Baccalaureate Certificate (p. 187)	School of Education (p. 112)	College of Health Education (p. 110)	
Secondary Mathematics, Post-Baccalaureate Certificate (p. 187)	School of Education (p. 112)	College of Health Education (p. 110)	
Secondary Science - Biology, Post-Baccalaureate Certificate (p. 188)	School of Education (p. 112)	College of Health Education (p. 110)	
Secondary Science - Chemistry, Post-Baccalaureate Certificate (p. 188)	School of Education (p. 112)	College of Health Education (p. 110)	
Secondary Science - Physical Science, Post-Baccalaureate Certificate (p. 189)	School of Education (p. 112)	College of Health Education (p. 110)	
Secondary Science - Physics, Post-Baccalaureate Certificate (p. 190)	School of Education (p. 112)	College of Health Education (p. 110)	
Secondary Social Studies - History, Post-Baccalaureate Certificate (p. 190)	School of Education (p. 112)	College of Health Education (p. 110)	
Secondary Social Studies - Political Science, Post-Baccalaureate Certificate (p. 191)	School of Education (p. 112)	College of Health Education (p. 110)	
Technology Computing Instruction, Post-Baccalaureate Certificate (p. 538)	Hasan School of Business (p. 489)	Hasan School of Business (p. 489)	

COLLEGE OF HEALTH & EDUCATION

CHE Vision:

To be the peoples' choice for health and education through the delivery of innovative instruction to establish diverse professionals.

CHE Mission:
Developing professionals through immersion in compassionate exploration and engaging complex real-life experiences.

CHE Core Values:

- Teaching with integrity
- Student-centered, culturally-responsive instruction
- Maintaining personal dignity
- Respecting diversity
- Advancing social justice
- Building empathy and resiliency
- Reflective evaluation
- Evidence-based instruction
- Advocating for community

The College of Health and Education offers many professional major programs of study. There are 2 schools within the college, the School of Health Sciences and Human Movement and the School of Education. Each School offers undergraduate and graduate degrees for professions in health and education.

The School of Health Sciences and Human Movement offers degrees in; Health Science B.S., Health Science and Administration B.A.S. online, Exercise Science, Physical Education and Recreation B.S., Health Coaching Minor, Coaching Minor, Exercise Science Minor, Fitness & Recreational Sports Minor, Public Health Minor, Outdoor Education Minor & Tourism Minor and graduate programs including Athletic Training M.S., & Athletic Training 3+2 Program.

The School of Education offers degrees in; Liberal Studies (Elementary), Early Childhood Education B.S., Middle School Math B.S., Education Minor, and graduate programs, Master of Education, Master of Education Online, Graduate Certificates & Alternative Licensure and Doctorate of Education.

CHE provides hands-on opportunities for students to be actively involved in their field before completing their degree. The Colleges at CSU Pueblo offer curricula that allow students the chance to gain the kind of experience and expertise necessary to be recognized by future employers and graduate programs.

Message from the Dean

I am pleased to know that you are interested in what Colorado State University Pueblo can contribute to your future, and I look forward to congratulating you on your admission! Associate Dean Dr. Jeff Piquette, the Director of the School of Education, joins me in the leadership for the college. We welcome you and look forward to assisting you to realize your future dreams.

Our university and college provide an exciting learning environment that is growing fast because of students like you. Our expanded academic offerings, new campus facilities, vibrant student life, various athletics, and professors and staff will contribute to your success. CSU Pueblo is an exciting place to live and learn. We encourage you to find a place to connect.

As a community of teachers and learners, the College of Health and Education staff is here for you. We are committed to providing an education that fosters excellence in communication, critical thinking, aesthetic awareness, personal ethics, research opportunities and life-long learning. Our students learn the skills to be leaders, responsible citizens and successful professionals. We value and champion the diversity of people, ideas, and experiences that contribute so much to our interconnected worlds.

We look forward to welcoming you to our community.

Dr. Carol Foust, Dean of the College of Health and Education and Director of the School of Health Sciences and Human Movement

Academic Departments & Programs

School of Education (p. 112)

Undergraduate Programs

- Early Childhood Education, Bachelor of Science (p. 128)
- Early Childhood Education: K-3 Teacher Preparation Concentration, Bachelor of Science (p. 129)
- Elementary Education: K-6 Teacher Preparation Concentration, Bachelor of Science (p. 176)
- Middle School Mathematics: 6-8 Teacher Preparation Concentration, Bachelor of Science (p. 184)

Minors

- Reading, Minor (p. 185)
- Secondary & K-12 Education, Minor (p. 185)

Graduate Programs

- Education: Art Education Concentration, Master of Education (p. 131)
- Education: Curriculum & Instruction Concentration, Master of Education (p. 134)
- Education: Early Childhood Education Concentration, Master of Education (p. 137)
- Education: Early Learning Concentration, Master of Education (p. 140)
- Education: Educational Leadership Concentration, Master of Education (p. 143)
- Education: English Concentration, Master of Education (p. 146)
- Education: Gifted Education Concentration, Master of Education (p. 149)
- Education: Health & Physical Education Concentration, Master of Education (p. 151)
- Education: Instructional Technology Concentration, Master of Education (p. 154)
- Education: Linguistically Diverse Concentration, Master of Education (p. 157)
- Education: Music Education Concentration, Master of Education (p. 160)
- Education: Reading, Language, & Literacy Concentration, Master of Education (p. 164)

- Education: Space Studies for Educators Concentration, Master of Education (p. 166)
- Education: Special Education Concentration, Master of Education (p. 169)
- Education: World Language Concentration, Master of Education (p. 172)

Certificates

- Character Education & Social Emotional Learning, Post-Baccalaureate Certificate (p. 128)
- Early Childhood Education, Post-Baccalaureate Certificate (p. 129)
- Education: Principal Licensure, Post-Baccalaureate Certificate (p. 163)
- K-12 Art, Post-Baccalaureate Certificate (p. 180)
- K-12 Culturally & Linguistically Diverse Education, Post-Baccalaureate Certificate (p. 181)
- K-12 Instructional Technology, Post-Baccalaureate Certificate (p. 181)
- K-12 Music, Post-Baccalaureate Certificate (p. 181)
- K-12 Physical Education, Post-Baccalaureate Certificate (p. 182)
- K-12 Special Education Generalist, Post-Baccalaureate Certificate (p. 182)
- K-12 World Languages - Spanish, Post-Baccalaureate Certificate (p. 182)
- K-6 Elementary Education, Post-Baccalaureate Certificate (p. 183)
- Middle School (6-8) Mathematics, Post-Baccalaureate Certificate (p. 183)
- Secondary English, Post-Baccalaureate Certificate (p. 187)
- Secondary Mathematics, Post-Baccalaureate Certificate (p. 187)
- Secondary Science - Biology, Post-Baccalaureate Certificate (p. 188)
- Secondary Science - Chemistry, Post-Baccalaureate Certificate (p. 188)
- Secondary Science - Physical Science, Post-Baccalaureate Certificate (p. 189)
- Secondary Science - Physics, Post-Baccalaureate Certificate (p. 190)
- Secondary Social Studies - History, Post-Baccalaureate Certificate (p. 190)
- Secondary Social Studies - Political Science, Post-Baccalaureate Certificate (p. 191)

Doctorate Programs

- Educational Leadership, Doctor of Education (p. 175)

School of Health Science & Human Movement (p. 191)

Undergraduate Programs

- Athletic Training 3+2 Program, Bachelor of Science/Master of Science (p. 207)
- Exercise Science, Physical Education, & Recreation: General Exercise Science Concentration, Bachelor of Science (p. 210)
- Exercise Science, Physical Education, & Recreation: K-12 Physical Education Teacher Preparation Concentration, Bachelor of Science (p. 212)
- Exercise Science, Physical Education, & Recreation: K-12 Teacher Preparation Concentration 3+2 Plan, Integrated Bachelor of Science/Master of Education: Health & Physical Education Concentration (p. 214)
- Exercise Science, Physical Education, & Recreation: Recreation Concentration, Bachelor of Science (p. 217)
- Exercise Science, Physical Education, & Recreation: Strength & Conditioning Concentration, Bachelor of Science (p. 218)
- Health Science & Administration, Bachelor of Applied Science (p. 220)
- Health Sciences General Concentration 3+2 Plan, Integrated Bachelor of Science/Master of Business Administration: Healthcare Administration Concentration (p. 534)
- Health Sciences: General Health Science Concentration, Bachelor of Science (p. 221)
- Health Sciences: Health Coaching Concentration, Bachelor of Science (p. 223)
- Health Sciences: Pre-Accelerated Nursing Concentration, Bachelor of Science (p. 224)
- Health Sciences: Pre-Athletic Training Concentration, Bachelor of Science (p. 225)
- Health Sciences: Pre-Nursing Concentration (p. 226)
- Health Sciences: Public Health Concentration, Bachelor of Science (p. 228)

Minors

- Coaching, Minor (p. 210)
- Exercise Science, Minor (p. 210)
- Fitness & Recreational Sports Management, Minor (p. 219)
- Health Coaching, Minor (p. 220)
- Outdoor Recreation, Minor (p. 229)
- Public Health, Minor (p. 230)
- Recreation, Minor (p. 230)
- Tourism, Minor (p. 230)

Certificates

- Health & Fitness Certification for the Department of Corrections (p. 219)
- Recreation Leadership, Certificate (p. 230)

3+2 Programs

- Athletic Training 3+2 Program, Bachelor of Science/Master of Science (p. 207)
- Athletic Training, Master of Science (p. 209)
- Exercise Science, Physical Education, & Recreation: K-12 Teacher Preparation Concentration 3+2 Plan, Integrated Bachelor of Science/Master of Education: Health & Physical Education Concentration (p. 214)
- Health Sciences General Concentration 3+2 Plan, Integrated Bachelor of Science/Master of Business Administration: Healthcare Administration Concentration (p. 534)

Graduate Programs

- Athletic Training, Master of Science (p. 209)

School of Education

School of Education Vision

To be the peoples' choice for excellence in teacher preparation, development, and leadership through building and bridging communities of learners using a delivery of innovative instruction to establish professionals able to provide equitable opportunities for diverse populations.

School of Education Mission

To engage and empower our community of learners and develop professional educators who respect diversity, advance social justice, and promote academic excellence through immersion in equitable exploration.

School of Education Core Values

- Change Agents
- Research
- Relationships
- Reflection
- Collaboration
- Compassion
- Democratic Ideal
- Equity
- Knowledge
- Perseverance

Conceptual Framework—Building & 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.

Expected Student Outcomes

The School of Education 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 *Colorado Teacher Quality Standards* and *Colorado Principal Quality Standards* 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 Quality Standards

1. Teachers demonstrate mastery of and pedagogical expertise in the content they teach.
2. Teachers establish a safe, inclusive and respectful learning environment for a diverse population of students.
3. Teachers plan and deliver effective instruction and create an environment that facilitates learning for their students.
4. Teachers demonstrate professionalism through ethical conduct, reflection, and leadership.

Principal Quality Standards

1. Principals Demonstrate Strategic Leadership.
2. Principals Demonstrate Instructional Leadership
3. Principals Demonstrate School Culture and Equity Leadership
4. Principals Demonstrate Human Resource Leadership
5. Principals Demonstrate Managerial Leadership
6. Principals Demonstrate External Development Leadership

Outcome Assessment Activities

The School of Education assesses licensure student knowledge and skills at three points in the program: admission to education, admission to student teaching, and during the student teaching semester (program completion). Assessment activities include a review of:

1. performance documented in students' e-portfolios;
2. evaluations of general education and content area knowledge;
3. ratings of proficiency on program standards by K-12 classroom teachers, University faculty, and student teacher supervisors based on direct observation of teaching;
4. self-evaluations/ratings of proficiency on program standards by program completers and graduates one year after teaching; and
5. ratings of proficiency by K-12 supervisors after graduates have taught for one year.

Teaching Endorsement Areas

The School of Education collaborates with other academic units to offer programs leading to Colorado teacher licensure in the following endorsement areas:

- Art (K-12)
- Computer Science (K-12) - *added endorsement only*
- Culturally & Linguistically Diverse Education (K-12) - *added endorsement only*
- Early Childhood Education (birth-age 8)
- Elementary Education (K-6)
- English (7-12)
- Gifted Education Core (K-12) - *added endorsement only*
- Mathematics (7-12)
- Middle School Mathematics (6-8)
- Music (K-12)
- Physical Education (K-12)
- Principal (K-12)
- Science (7-12)
- Social Studies (7-12)
- Special Education Generalist (ages 5 - 21)
- World Languages–Spanish (K-12)

The School of Education offers alternative licensure (for those who already have a bachelor's degree) in the following areas: Ag, ASL, Art, Business/Marketing, Computer Science, Dance, Drama, Early Childhood Education, Elementary, English, Family and Consumer Sciences, Health, Mathematics (secondary and MS), Music, PE, Principal, Science, Social Studies, Special Education, Speech, Tech Ed, and World Language.

Admission to the School of Education

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 (4 c.h.). 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 Rhetoric & Writing I (GT-CO1) (3 c.h.) and ENG 102 Rhetoric & Writing II (GT-CO2) (3 c.h.) with grades of C or better.
3. For students pursuing secondary or K-12 licensure, completion of math course required by major field with a grade of C or better[1].
   For students pursuing elementary or early childhood education: completion of one course that meets General Education requirements with a C or better[1].
4. Completion of CID 103 Speaking & Listening (3 c.h.) or CID 221 Interpersonal Communication (GT-SS3) (3 c.h.)with a grade of C or better.
5. Completion of ED 301 Frameworks of Teaching (4 c.h.) with a grade of C or better.
6. Completion of a formal, standardized test during ED 301 Frameworks of Teaching (4 c.h.) such as the Proficiency Profile and a writing sample.
7. Meeting the fingerprint background check requirement by the Colorado Department of Education (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 *School of Education Handbook*. All portfolios will be submitted in electronic format.

[1] The Associate Dean will evaluate transfer courses for admission purposes.

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 School of Education. Additional details related to program retention are included in the *School of 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. *Please note that no state test is required to be licensed in K-12 and Secondary endorsements, and so none are required for admission to student teaching for these majors as well.*

6. Successful completion of an education portfolio. Six types of materials will be submitted with the portfolio:
    1. transcripts and official documents demonstrating students performance in University classes,
    2. materials developed in University classes which demonstrate proficiency on specific education standards.
    3. recommendations and evaluations from teachers,
    4. materials used in field experience and videos of teaching, and
    5. personal reflections and summaries about progress.
    Specific portfolio requirements and manner of evaluation are included in the appendices to the *School of Education Handbook*. All portfolios will be submitted in electronic format.
7. Successful completion of all required early field experience hours and cooperating teacher evaluations. Hours must include work at the appropriate levels and in a variety of diverse high need settings.
8. Completion of any support plans (unless being extended into student teaching).
9. Meeting the fingerprint background check requirement by the Colorado Department of Education.

Applications must be submitted a semester in advance; the deadline for the application is 5:00pm on Wednesday of week 3 of classes. Student teaching requires full time effort; therefore students may not enroll in University courses other than Student Teaching and Capstone Seminar without permission of the Associate Dean.

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.

For students who are interested in pursuing teacher licensure in states other than Colorado: You are strongly encouraged to work with the academic department and the applicable professional licensure board in the state in which you intend to pursue licensing to ensure all licensure requirements will be satisfactorily met.

Performance Assessment Activities

In the School of Education, 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 School of Education Office.

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 can be found on the program's website: https://www.csupueblo.edu/institutional-research/student-outcomes/licensure-exams.html.

Academic Programs

Undergraduate Programs

- Early Childhood Education, Bachelor of Science (p. 128)
- Early Childhood Education: K-3 Teacher Preparation Concentration, Bachelor of Science (p. 129)
- Elementary Education: K-6 Teacher Preparation Concentration, Bachelor of Science (p. 176)
- Middle School Mathematics: 6-8 Teacher Preparation Concentration, Bachelor of Science (p. 184)

Minors

- Reading, Minor (p. 185)
- Secondary & K-12 Education, Minor (p. 185)

Graduate Programs

- Education: Art Education Concentration, Master of Education (p. 131)
- Education: Curriculum & Instruction Concentration, Master of Education (p. 134)
- Education: Early Childhood Education Concentration, Master of Education (p. 137)
- Education: Early Learning Concentration, Master of Education (p. 140)
- Education: Educational Leadership Concentration, Master of Education (p. 143)
- Education: English Concentration, Master of Education (p. 146)
- Education: Gifted Education Concentration, Master of Education (p. 149)
- Education: Health & Physical Education Concentration, Master of Education (p. 151)
- Education: Instructional Technology Concentration, Master of Education (p. 154)
- Education: Linguistically Diverse Concentration, Master of Education (p. 157)
- Education: Music Education Concentration, Master of Education (p. 160)
- Education: Reading, Language, & Literacy Concentration, Master of Education (p. 164)
- Education: Space Studies for Educators Concentration, Master of Education (p. 166)

- Education: Special Education Concentration, Master of Education (p. 169)
- Education: World Language Concentration, Master of Education (p. 172)

Certificates

- Character Education & Social Emotional Learning, Post-Baccalaureate Certificate (p. 128)
- Early Childhood Education, Post-Baccalaureate Certificate (p. 129)
- Education: Principal Licensure, Post-Baccalaureate Certificate (p. 163)
- K-12 Art, Post-Baccalaureate Certificate (p. 180)
- K-12 Culturally & Linguistically Diverse Education, Post-Baccalaureate Certificate (p. 181)
- K-12 Instructional Technology, Post-Baccalaureate Certificate (p. 181)
- K-12 Music, Post-Baccalaureate Certificate (p. 181)
- K-12 Physical Education, Post-Baccalaureate Certificate (p. 182)
- K-12 Special Education Generalist, Post-Baccalaureate Certificate (p. 182)
- K-12 World Languages - Spanish, Post-Baccalaureate Certificate (p. 182)
- K-6 Elementary Education, Post-Baccalaureate Certificate (p. 183)
- Middle School (6-8) Mathematics, Post-Baccalaureate Certificate (p. 183)
- Secondary English, Post-Baccalaureate Certificate (p. 187)
- Secondary Mathematics, Post-Baccalaureate Certificate (p. 187)
- Secondary Science - Biology, Post-Baccalaureate Certificate (p. 188)
- Secondary Science - Chemistry, Post-Baccalaureate Certificate (p. 188)
- Secondary Science - Physical Science, Post-Baccalaureate Certificate (p. 189)
- Secondary Science - Physics, Post-Baccalaureate Certificate (p. 190)
- Secondary Social Studies - History, Post-Baccalaureate Certificate (p. 190)
- Secondary Social Studies - Political Science, Post-Baccalaureate Certificate (p. 191)

Doctorate Programs

- Educational Leadership, Doctor of Education (p. 175)

Culturally/Linguistically Diverse Ed (CLDE)

CLDE 294 Field Experience (1-12 V)
As Needed.
Field experience in a linguistically diverse educational setting appropriate to lower division students.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (24).

CLDE 400 Workshop (1-3 V)
As Needed.
Development of classroom materials and curriculum in linguistically diverse education.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CLDE 401 Teaching English Language Learners 3(3-0)
As Needed.
Methods and techniques of teaching English to children of linguistically diverse backgrounds; K-6 and 7-12 focus.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

CLDE 403 Content Instruction for EL Learners 3(3-0)
Fall.
Methods and techniques for teaching content area subjects to students of linguistically different backgrounds; K-6 and 7-12 focus.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to Education.

CLDE 420 Literacy for Eng Lang Learners 3(3-0)
Summer.
Methods and techniques of teaching Literacy to K-12 English Language Learners.
Prerequisite: None.
Corequisites: None.
Registration Information: Admission to school of education. Field experience required.

CLDE 460 Assess & Admin of Ling Div Ed 3(3-0)
Summer.
Study of state, federal, and local laws and policies concerning CLDE programs; language proficiency instruments used by teachers for assessment and placement of LDE students.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

CLDE 481 Practicum with English Learners (1-6 V)
As Needed.
Supervised practicum and seminar.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education or graduate standing. Repeatable (99).

CLDE 494 Field Experience (1-6 V)
As Needed.
Field Experience in an educational setting related to culturally and linguistically diverse education.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (99).

CLDE 495 Independent Study (1-3 V)
As Needed.
Independent study options for the student specializing in culturally and linguistically diverse education.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (99).

CLDE 500 Workshop (1-3 V)
As Needed.
Practical in development of classroom materials/curriculum in linguistically diverse education.
Prerequisites: None.
Corequisites: None.
Registration Information: Not applicable to the M.Ed. Repeatable (99).

CLDE 501 Graduate Topics in Culturally & Ling. Div. Ed. 0.5-3(0.5-3-0)
As Needed.
Graduate topics in culturally and linguistically diverse education. Each has a subtitle; no subtitle may be repeated for credit.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate standing. Counts for M.Ed. credit with approval of Program Director. Repeatable (99).

CLDE 502 Teaching English Language Learners 3(3-0)
As Needed.
Methods and techniques of teaching English to children of linguistically diverse backgrounds; K-6 and 7-12 focus.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education or graduate standing. Field experience required.

CLDE 503 Content Instruction for EL Learners 3(3-0)
Fall.
Methods and techniques for teaching content area subjects to students of linguistically different backgrounds; K-6 and 7-12 focus.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Field experience required.

CLDE 520 Literacy for Eng Lang Learners 3(3-0)
Summer.
Methods and techniques of teaching Literacy to K-12 English Language Learners.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to the School of Education. Field experience required.

CLDE 523 (ENG 523) Syntax for TESL/TEFL 3(3-0)
As Needed.
Introduction to English syntactic structures relevant to ESL/EFL teaching. Includes an examination of core English structures from various perspectives.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

CLDE 530 (ENG 530) Language Acquisition & Linguistics 3(3-0)
As Needed.
Development of English language from childhood through adulthood, including phonology, grammar, vocabulary, and communicative competence. Acquisition of English as a second language.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CLDE 553 (ENG 553) Language in the USA 3(3-0)
As Needed.
Explores language use in the U.S. and examines current language-related myths and issues in the U.S., including issues related to indigenous languages and immigrant languages.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

CLDE 560 Ling Div Assess & Admin 3(3-0)
Summer.
Study of state, federal, and local laws and policies concerning CLDE programs; language proficiency instruments used by teachers for assessment and placement of LDE students.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education or graduate standing.

CLDE 581 Practicum with English Learners (1-6 V)
As Needed.
Supervised practicum and seminar.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Repeatable (99).

CLDE 591 Special Topics (1-12 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to the School of Education.

CLDE 594 Field Experience (1-12 V)
As Needed.
Field Experience in an educational setting related to culturally and linguistically diverse education.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate status. Repeatable (99).

CLDE 595 Independent Study (1-3 V)
As Needed.
For the student specializing in culturally and linguistically diverse education.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate standing. Repeatable (99).

Early Childhood Education (ECE)

ECE 101 Introduction to Early Childhood Ed 3(3-0)
As Needed.
Provides an introduction to the profession of Early Childhood Education.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECE 102 Intro to ECE Lab Techniques 3(2-2)
As Needed.
Field work in a child care setting (60 hours). The supervised placement provides the student with the opportunity to observe children, practice appropriate interactions, and develop effective management techniques.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECE 103 Guidance Strat for Young Children 3(3-0)
As Needed.
Explores guidance theories, applications, goals, and techniques, as well as factors that influence behavioral expectations of children.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECE 111 Infant & Toddler Theory & Practice 3(3-0)
As Needed.
Presents an overview of theories, applications (including observations), and issues pertinent to infant and toddler development in group and/or family settings.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECE 205 Nutrition, Health and Safety 3(3-0)
As Needed.
Focuses on nutrition, health and safety as a key factor for optimal growth and development of young children.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECE 241 Admin: Human Relations for ECE 3(3-0)
As Needed.
Focuses on the human relations component of an early childhood professional's responsibilities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECE 294 Field Experience (1-12 V)
As Needed.
Field experience in an Early Childhood Education setting.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ECE 350 Programs for ECE 3(3-0)
Fall.
Explores the different programs available for children in the ECE age range, both in and out of a school setting.
Prerequisite: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 355 Play & Creative Expression in ECE 3(3-0)
As Needed.
Focuses on principles and methods for using meaningful play and creative arts experiences across the early childhood curriculum to enhance the development of basic skills.
Prerequisite: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 420 Involving Diverse Families in ECE 3(3-0)
As Needed.
Explores the theoretical foundations and practical applications of family diversity and parent involvement in early childhood education.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 425 Intro to EC Spec Ed 3(3-0)
As Needed.
Explores educating young children with disabilities or special needs in the early childhood setting.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 430 Teaching Young CLD Children 3(3-0)
As Needed.
Explores the research and best practices of teaching young children with culturally and linguistically diverse backgrounds (Birth-3rd grade).
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 440 Effective Instr in Early Literacy 3(3-0)
As Needed.
Explores the development of reading, writing, listening, speaking, and doing in ECE including a review of current research on environmental factors that enhance or reduce language literacy acquisition and development.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 460 Managing ECE Classrooms 2(2-0)
As Needed.
Explores components of effective classroom management procedures with young children in groups. Topics include theoretical perspectives, rules and organization, pro-social behavior, and effective pedagogical decisions.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 461 Teaching ECE Social Studies 2(2-0)
As Needed.
This course teaches teachers of young children the subject area of social studies in the K-3 curriculum. Content knowledge and teaching strategies will be the focus of the course.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 462 Teaching ECE Reading 3(3-0)
As Needed.
This course encompasses how to teach reading in the K-3 curriculum. Content knowledge and teaching strategies will be the focus of the course.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Requires 30 hours of field experience.

ECE 463 Teaching ECE Math 2(2-0)
As Needed.
This course encompasses mathematics in the K-3 curriculum. Content knowledge and teaching strategies will be the focus of the course.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. 30 hours of field experience are required.

ECE 464 Teaching ECE Science 2(2-0)
As Needed.
This course teaches teachers of young children the subject area of science in the K-3 curriculum. Content knowledge and teaching strategies will be the focus of the course.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 485 Capstone in ECE 1(1-0)
As Needed.
Explores substantive issues facing new ECE teachers including job search skills, meeting the needs of at-risk students, creating equitable learning environments, and methods of inquiry in education.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ECE 486 Student Teaching in ECE (6-12 V)
As Needed.
Student Teaching at the K-3 level.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ECE 491 Special Topics 1-3(1-3-0)
As Needed.
Special topics in early childhood education. Each has a subtitle; no subtitle may be repeated for credit.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (99).

ECE 493 Seminar 3(3-0)
As Needed.
Seminar in Early Childhood Education (for non-licensure ECE majors). Focuses on ensuring high-quality internships in ECE and meeting state requirements for desired credentials.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 494 Field Experience (1-12 V)
As Needed.
Upper division field experience in an Early Childhood Education setting.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (99).

ECE 495 Independent Study 1-3(1-3-0)
As Needed.
Independent Study.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (99).

ECE 498 Internship 9(9-0)
As Needed.
Internship in an Early Childhood Education setting (for non-licensure ECE majors) including completion of a major project and presentation of results.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 501 Graduate Topics in Early Childhood Education 0.5-3(0.5-3-0)
As Needed.
Graduate topics in early childhood education. Each has a subtitle; no subtitle may be repeated for credit.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate standing. Counts for M.Ed. credit with approval of Program Director. Repeatable (99).

ECE 520 Adv Mthds Involving Div Fam in ECE 3(3-0)
As Needed.
An advanced exploration of the theoretical foundations and practical applications of family diversity and parent involvement in early childhood education.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 525 Practices in EC Special Education 3(3-0)
As Needed.
An advanced exploration of educating young children with disabilities or special needs in the early childhood setting.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 530 Adv Mthds of Tchg CLD Children 3(3-0)
As Needed.
An advanced exploration of the research and best practices of teaching young children with culturally and linguistically diverse backgrounds (Birth-3rd grade).
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 540 Adv Mthds of Effect Inst Early Lit 3(3-0)
As Needed.
An advanced exploration of the development of reading, writing, listening, speaking, and doing in ECE including factors that enhance or reduce language literacy acquisition and development.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 550 Adv Exploration of Programs for ECE 3(3-0)
As Needed.
An advanced exploration of the different programs available for children in the ECE age range, both in and out of a school setting.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 555 Advanced Play & Creativity in ECE 3(3-0)
As Needed.
Focuses on developing advanced principles and methods for using meaningful play and creative arts experiences across the early childhood curriculum to enhance the development of basic skills.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 560 Adv Management of ECE Classrooms 2(2-0)
As Needed.
An advanced exploration of effective classroom management procedures with young children in groups. Includes theoretical perspectives, rules and organization, pro-social behavior, and effective pedagogical decisions.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 561 Adv Mthds of Tchg ECE Soc Stud 2(2-0)
As Needed.
An advanced exploration of how to teach young children the subject area of social studies in the K-3 curriculum. Content knowledge and teaching strategies will be the focus of the course.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 562 Adv Mthds of Tchg ECE Reading (3 V)
As Needed.
An advanced exploration of the methods of teaching language arts in the K-3 curriculum with a focus on reading. Content knowledge and teaching strategies will be the focus of the course.
Prerequisites: None.
Corequisites: None.
Registration Information: Includes 30 hours of field work.

ECE 563 Adv Mthds of Tchg ECE Math 2(2-0)
As Needed.
An advanced exploration of how to teach young children the subject area of mathematics in the K-3 curriculum. Content knowledge and teaching strategies will be the focus of the course.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 564 Adv Mthds of Tchg ECE Science 2(2-0)
As Needed.
An advanced exploration of how to teach young children the subject area of science in the K-3 curriculum. Content knowledge and teaching strategies will be the focus of the course.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 591 Special Topics 1-3(1-3-0)
As Needed.
Special topics in early childhood education. Each has a subtitle; no subtitle may be repeated for credit. Can count for M.Ed. with approval of Program Director.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (99).

ECE 594 Field Experience (1-12 V)
As Needed.
Field Experience in an early childhood educational setting.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate status.

ECE 595 Independent Study 1-3(1-3-0)
As Needed.
Independent Study.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (99).

Education (ED)

ED 102 Teaching as a Career 1(1-1)
As Needed.
Orientation to teaching and teacher education. Not required for teacher certification.
Prerequisites: None.
Corequisites: None.
Registration Information: Class sessions and classroom observation required.

ED 202 Foundations of Education 3(3-0)
Fall, Spring, Summer.
Historical, philosophical and sociological dimensions of education including legal and financial challenges associated with the institution of education. 30 hours field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 280 Educational Media and Technology 3(3-0)
Fall, Spring, Summer.
Prepares teachers to use technology for instruction, assessment, management, and research.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

ED 294 Field Experience (1-12 V)
As Needed.
Field experience in an educational setting.
Prerequisite: None.
Corequisite: None.
Registration Information: Not applicable to teacher certification.

ED 301 Frameworks of Teaching 4(4-0)
Fall, Spring, Summer.
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: None.
Corequisites: None.
Registration Information: Completion of 45 credit hours and 2.6 cumulative GPA.

ED 351 Children's Literature 3(3-0)
Fall, Summer.
Classic and contemporary children's literature with emphasis on selection and evaluation.
Prerequisite: ENG 102.
Corequisite: None.
Registration Information: Repeatable (99).

ED 380 Integrated Methods in Elementary 3(3-0)
Fall, Summer.
Prepares elementary teachers to integrate the expressive arts and physical education into the elementary curriculum. 30 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 400 Workshop (1-3 V)
As Needed.
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: None.
Corequisite: None.
Registration Information: Repeatable (99).

ED 406 Behavioral Support 3(3-0)
Summer.
Prepares teachers to implement individual, classroom-wide and school-wide behavioral supports and interventions. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 407 Levels of Support I 3(3-0)
Spring.
Prepares teachers to teach students with special needs in inclusive environments, with emphasis on literacy, math, and academic interventions. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 408 Levels Of Support II 3(3-0)
Fall.
Addresses effective instruction for secondary students, including transition planning. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Beginning reading course strongly recommended as a prerequisite. Admission to School of Education.

ED 409 Levels Of Support III 3(3-0)
Summer.
Focuses on instructional programs for K-12 students with severe learning and behavioral challenges. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 410 Collaboration in Education 3(3-0)
Summer.
Supports skills at co-teaching, teaming, and collaboration with teachers, families, paraprofessionals, and others to strengthen student achievement. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 412 Teaching Diverse Learners 3(3-0)
Fall, Spring.
Focuses on legislation for special education, nature of exceptionalities, and meeting the needs of K-12 students, including second language learners. 30 hours field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 413 Teaching Elementary Social Studies 2(2-0)
Fall, Spring, Summer.
Methods of teaching social studies in the elementary school.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 414 Teaching Elementary Science & Health 2(2-0)
Fall, Spring.
Methods of teaching health and science in the elementary school; 30 hours of field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 417 Teaching Mathematics in Elementary School 2(2-0)
As Needed.
Scope and sequence of elementary school mathematics are examined along with instructional methods that address the developmental differences of children. 30 hours of field experience.
Prerequisite: MATH 361.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 421 Classroom Integration of Internet 2(2-0)
As Needed.
Methods to effectively and legally integrate the Internet into the classroom as a communication and instructional tool.
Prerequisite: ED 280.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 423 Teaching and Managing Technology 3(3-0)
As Needed.
Strategies, processes, and procedures for managing technology in K-12, including efficient use of emerging pedagogies.
Prerequisite: ED 280.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 427 Productivity Tools for Classroom 1(1-0)
As Needed.
Applications of Microsoft Office as a productivity tool, including integration of use in classroom. Field experience required.
Prerequisite: ED 280.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 428 Integration of Educational Software 1(1-0)
As Needed.
Familiarity with and criteria for selecting evaluating, and using quality educational software. Field experience required.
Prerequisite: ED 280.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 429 Literacy & Technology 3(3-0)
Summer.
Methods for using technology to assess and teach literacy.
Prerequisite: ED 280.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 431 Diverse Learners & Technology 3(3-0)
Summer.
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.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 432 Hardware & Networking for Educators 3(3-0)
As Needed.
Pedagogical and practical considerations in using networking and hardware in schools.
Prerequisite: ED 280.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 433 Instructional Theory & Tech Design 3(3-0)
As Needed.
Instructional system design theories and models and their adaptation to plan and use technology effectively in the classroom. Field experience required.
Prerequisite: ED 280.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 434 Multimedia Design 3(3-0)
Summer.
Methods and tools for creating multimedia learning objects for K-12 classrooms. Field experience required.
Prerequisite: ED 280.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 435 Classroom Management 3(2-3)
As Needed.
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: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 436 Technology & Assessment Tools 3(3-0)
As Needed.
Prepares teachers to use technology in assessment practices in the classroom.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 444 Teaching Secondary Science 4(3-2)
Fall.
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: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 445 Assessment & Data Driven Instruction 3(3-0)
Fall.
Prepares teachers to select, administer, and interpret formal and informal assessments to improve instruction. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 446 Teaching K-12 Art 4(3-2)
Fall.
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: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 447 Teaching English in Secondary Schools 4(3-2)
Fall.
Familiarizes students with Colorado foreign language standards, standards-based lesson and unit planning, and authentic assessment. 60 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 448 Teaching Foreign Language (K-12) 4(0-12)
Fall.
Familiarizes students with Colorado foreign language standards, standards-based lesson and unit planning, and authentic assessment. 60 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 451 Teaching Secondary Social Studies 4(3-2)
Fall.
Familiarizes students with the Colorado content standards, including standards-based lesson and unit planning strategies and authentic assessment. 60 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 452 Teaching Secondary Business 4(3-2)
As Needed.
Prepares teachers to teach all areas of the business curriculum in secondary schools. 60 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 481 Practicum & Seminar in Education (3-6 V)
As Needed.
Supervised practicum and seminar in second teaching or endorsement area.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education. Repeatable (99).

ED 485 Capstone Seminar in Education 1(1-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: None.

ED 487 Student Teaching Elementary (6-12 V)
As Needed.
Student teaching at the elementary level.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 488 Student Teaching Secondary (6-12 V)
As Needed.
Student teaching at the secondary level.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 489 Student Teaching K-12 (6-12 V)
As Needed.
Student teaching at the K-12 level.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ED 494 Field Experience (1-12 V)
As Needed.
Field experience in an educational setting. Not required for Teacher Certification.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (120).

ED 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ED 500 Professional Development for Teachers 0.5-3(0.5-3-0)
As Needed.
Professional development for teachers. Each has a subtitle describing the specific content. Does not count for M.Ed. credit.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ED 501 Graduate Topics in Education (0.5-3 V)
Fall, Spring, Summer.
Graduate topics in education. Each has a subtitle; no subtitle may be repeated for credit.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Counts for M.Ed. credit with approval of Program Director. Repeatable (99).

ED 502 Teacher As Change Agent 3(3-0)
Fall, Spring.
Introduces strategies for professional growth including interpretation of research and professional collaboration.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to M.Ed. Program and a teaching license or eligibility for teaching license.

ED 503 Teacher as Researcher 3(3-0)
Fall, Spring.
Develops skills at conducting and applying action research strategies to improve teaching and learning.
Prerequisite: ED 502.
Corequisite: None.
Registration Information: Admission to M.Ed. program.

ED 504 Leading Change in America's Schools 3(3-0)
Fall, Spring.
Builds teachers' skills in leading school change.
Prerequisite: ED 502.
Corequisite: None.
Registration Information: Admission to M.Ed. program.

ED 506 Behavioral Support 3(3-0)
Summer.
Prepares teachers to implement individual, classroom-wide and school-wide behavioral supports and interventions. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 507 Levels of Support I 3(3-0)
Spring.
Prepares teachers to teach students with special needs in inclusive environments, with emphasis on literacy, math, and academic interventions. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 508 Levels of Support II 3(3-0)
Fall.
Addresses effective instruction for secondary students, including transition planning. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 509 Levels of Support III 3(3-0)
Summer.
Focuses on instructional programs for K-12 students with severe learning and behavioral challenges. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 510 Collaboration in Education 3(3-0)
Summer.
Supports skills at co-teaching, teaming, and collaboration with teachers, families, paraprofessionals, and others to strengthen student achievement. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 512 Teaching Diverse Learners 3(3-0)
Fall, Spring, Summer.
Focuses on legislation for special education, nature of exceptionalities, and meeting the needs of K-12 students, including second language learners; 30 hours field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 514 Teaching K-6 Math 2(2-0)
Fall, Spring.
Focuses on teaching methods, materials, and assessment strategies in math in the elementary school; 30 hours of field experiences.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 520 Educational Media and Technology 3(3-0)
Fall, Spring, Summer.
Prepares teachers to use technology for instruction, assessment, management, and research.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 521 Classroom Integration of Internet 2(2-0)
As Needed.
Methods to effectively and legally integrate the Internet into the classroom as a communication and instructional tool.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 523 Teaching & Managing Technology 3(3-0)
As Needed.
Strategies, processes, and procedures for managing technology in K-12, including efficient use of emerging pedagogies.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 524 Advanced Techniques of Teaching Elementary Social 2(2-0)
Fall, Spring, Summer.
Analysis of techniques for conceptual approaches to teaching socialization skills, critical thinking, and inquiry skills; helping children develop healthy attitudes and values.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 525 Advanced Techniques of Teaching Elementary Science 2(2-0)
Fall, Spring.
Emphasis on the newest concepts, techniques and materials for teaching elementary school science and health.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 527 Productivity Tools for Classroom 1(1-0)
As Needed.
Applications of Microsoft Office as a productivity tool, including integration of use in classroom. Field experience required.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 528 Integration of Educational Software 1(1-0)
As Needed.
Familiarity with and criteria for selecting evaluating, and using quality educational software. Field experience required.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 529 Literacy & Technology 3(3-0)
Summer.
Methods for using technology to assess and teach literacy. Field experience required.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 531 Diverse Learners & Technology 3(3-0)
Summer.
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 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 532 Hardware & Networking for Educators 3(3-0)
As Needed.
Pedagogical and practical considerations in using networking and hardware in schools.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 533 Instructional Theory & Tech Design 3(3-0)
As Needed.
Instructional system design theories and models and their adaptation to plan and use technology effectively in the classroom. Field experience required.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 534 Multimedia Design 3(3-0)
Summer.
Methods and tools for creating multimedia learning objects for K-12 classrooms. Field experience required.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 536 Technology & Assessment Tools 3(3-0)
As Needed.
Prepares teachers to use technology in assessment practices in the classroom.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 540 Foundations of American Education 3(3-0)
As Needed.
A foundational investigation into the historical, philosophical, and sociological dimensions of education in the United States, including advocacy, legislation, leaders and structures, and finance.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 542 Contemporary Techniques of Classroom Management 2(2-0)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

ED 543 Teaching K-12 Health 3(3-0)
As Needed.
Focuses on teaching methods, using appropriate materials and strategies, as well as creating assessments, necessary to prepare students to teach in K-12, standards-based, health classrooms.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 544 Teaching Secondary Science 3(3-0)
Fall.
Focuses on teaching methods, materials, and assessment strategies necessary to prepare students to teach in secondary standards-based science classrooms.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 545 Assessment & Data Driven Instruction 3(3-0)
Fall.
Prepares teachers to select, administer, and interpret formal and informal assessments to improve instruction. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 546 Teaching K-12 Art 3(3-0)
Fall.
Focuses on Art curriculum, methods, and assessment to prepare art educators to successfully teach in K-12 standards-based art classrooms.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 547 Teaching English in Secondary Schools (3 V)
Fall.
Familiarizes students with Colorado Language Arts Standards, standards-based lesson, and unit planning and authentic assessment.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 548 Teaching Foreign Language 3(3-0)
Fall.
Familiarizes students with Colorado Foreign Language Standards, standards-based lesson and unit planning and authentic assessment.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 550 K-12 Music Methods 3(3-0)
Fall.
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: None.
Corequisite: None.
Registration Information: Graduate standing.

ED 551 Teaching Secondary Social Studies 3(3-0)
Fall.
Familiarizes students with Colorado Social Studies Content Standards, standards-based lesson and unit planning strategies and authentic assessment.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 552 Teaching Secondary Business 3(3-0)
As Needed.
Prepares teachers to teach all areas of the business curriculum in secondary schools.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 560 Professional Develop in Curriculum & Instruction 4(4-0)
Fall, Spring, Summer.
Stresses skill-building in classroom instruction, including curriculum development and student assessment. Current innovations in public education are also addressed.
Prerequisite: None.
Corequisite: None.
Registration Information: Completion of 45 credit hours and 2.6 cumulative GPA.

ED 565 Introduction to Educational Statistics 1(1-0)
As Needed.
Statistical methods in education; graphs, charts, frequency distributions, central tendencies, dispersion, correlation, sampling errors, estimation, and hypothesis testing.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 570 The Technology Coordinator 3(3-0)
As Needed.
Examination of the roles of the technology coordinator in a K-12 educational setting.
Prerequisite: ED 280 or ED 522.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 571 Distance Learning 3(3-0)
As Needed.
Provides information needed to be knowledgeable distance educators and instructional developers for K-12 distance learners.
Prerequisite: ED 280 or ED 522.
Corequisite: None.
Registration Information: None.

ED 574 Early Childhood Space Exploration 3(3-0)
As Needed.
Designed to provide tools necessary to teach space concepts through inquiry-based learning to young children.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 575 Lunar/Mars Exploration 3(3-0)
As Needed.
Participants will investigate how to establish and maintain humans on our moon or Mars and how to integrate these concepts into the classroom.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 576 Rocketry & Exploration 3(3-0)
As Needed.
Participants will examine the technological advances that are being developed for human exploration of the solar system.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 577 Astronomy for the Classroom 3(3-0)
As Needed.
Participants will investigate topics such as motions of the heavens, astronomical research tools, stars, and constellations, 3D exploration of comets, auroras, and planets.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 578 Long Term Space Travel 3(3-0)
As Needed.
Participants will investigate answers to how humans can expand beyond home to maximize the benefits from space exploration.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 579 Earth Systems Science 3(3-0)
As Needed.
Participants will investigate answers to how humans can expand beyond home to maximize the benefits from space exploration.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 580 Integrated Methods 3(3-0)
Fall, Spring.
Prepares elementary teachers to teach Social Studies, with emphasis on integration of the expressive arts and PE.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 581 Practicum & Seminar in Education (1-6 V)
Fall, Spring, Summer.
Supervised practicum and seminar in special education.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education. Repeatable (99).

ED 591 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

ED 592 Research (1-3 V)
As Needed.
Research.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of program director. Repeatable (99).

ED 593 Seminar (1-6 V)
Fall, Spring, Summer.
Seminar.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education. Repeatable (99).

ED 594 Field Experience (1-12 V)
As Needed.
Field experience in an educational setting.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

ED 595 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

ED 599 Thesis Research (1-6 V)
As Needed.
Thesis Research.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of program Director. Repeatable (99).

English as a Second Language (ESL)

ESL 065 Beginning Reading/Writing 6(10-)
As Needed.
Learn reading skills/strategies to understand beginning texts. Respond to questions through discussion and writing. Read short outside texts. Write sentences and paragraphs with correct spelling.
Prerequisite: None.
Corequisites: None.
Registration Information: Acceptance to ELI.

ESL 066 Beginning Listening/Speaking 6(10-)
As Needed.
Develop academic skills in listening and speaking. Engage in speaking using comprehensible pronunciation. Understand simplified spoken English and respond appropriately both orally and in writing.
Prerequisite: None.
Corequisites: None.
Registration Information: Acceptance to ELI.

ESL 075 Intermediate Reading/Writing 6(10-)
As Needed.
Develop critical thinking skills. Improve reading speed and comprehension. Learn skills necessary for academic writing: development of paragraphs and compositions using description, narrative, and chronology.
Prerequisite: None.
Corequisites: None.
Registration Information: Acceptance to ELI.

ESL 076 Intermediate Listening/Speaking 6(10-)
As Needed.
Understand spoken English in common settings. Practice speaking appropriately in academic and social situations. Use multimedia to develop communicative competence.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance to ELI.

ESL 085 High-Intermediate Reading/Writing 6(10-)
As Needed.
Read authentic and ESL materials with increasing critical ability and speed. Write more intelligibly and decrease grammatical errors. Understand several types of essay organization.
Prerequisite: None.
Corequisites: None.
Registration Information: Acceptance to ELI.

ESL 086 Hi-Intermediate Listening/Speaking 6(10-)
As Needed.
Understand spoken English at near normal speed. Improve fluency. Interact more confidently with other students and in presentations. Use multimedia to increase communicative competence.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance to ELI.

ESL 091 Special Topics (1-12 V)
As Needed.
Selected topics in ESL.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance to ELI. Repeatable (99).

ESL 095 Advanced Reading/Writing 6(10-)
As Needed.
Read authentic materials with near-native critical ability and speed. Write intelligibly with few grammatical and idiomatic errors. Understand thoroughly essay organization and development.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance to ELI.

ESL 096 Advanced Listening/Speaking 6(10-)
As Needed.
Understand English at natural speed in social, academic, and professional situations. Speak confidently through interaction with native speakers and presentations. Multimedia experience enhances communicative competence.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance to ELI.

Reading (RDG)

RDG 099 Developmental Reading Skills (3 V)
As Needed.
Students will apply strategies for improving comprehension, developing vocabulary, and increasing rate for reading college textbooks.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

RDG 355 Linguistics for Educators 3(3-0)
As Needed.
Focus on linguistics, the study of the English language, particularly the subtopics of phonology, orthography, morphology, semantics, syntax, and pragmatics.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

RDG 360 Practicum (1-3 V)
As Needed.
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: None.
Corequisites: None.
Registration Information: Admission to School of Education.

RDG 410 Teaching Reading 3(3-0)
Fall, Spring.
Includes reading instruction, emphasizing methods and assessment strategies to meet K-6 Colorado content standards; 30 hours of field experience.
Prerequisites: RDG 355.
Corequisites: None.
Registration Information: Admission to School of Education.

RDG 411 Teaching Writing 2(2-0)
As Needed.
Focuses on writing instruction for P-12 students; 30 hrs. Field work required.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to the School of Education required. Successful completion of RDG 355 and RDG 410 strongly recommended.

RDG 435 Disciplinary Literacy 4(3-2)
As Needed.
Focuses on skills and strategies to help students read, write, speak, listen, and view as a professional within their discipline area. 60 hours of fieldwork required.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

RDG 450 Reading Assessment & Intervention 3(3-0)
As Needed.
Research-based assessment and instruction of reading, to include the five components of reading and best practices for reading intervention.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Completion of RDG 355 highly recommended.

RDG 491 Special Topics (1-3 V)
As Needed.
Special topics.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (30).

RDG 495 Independent Study (1-3 V)
As Needed.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (30).

RDG 501 Graduate Topics in Reading 0.5-3(0.5-3-0)
As Needed.
Graduate topics in reading. Each has a subtitle; no subtitle may be repeated for credit.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate standing. Counts for M.Ed. credit with approval of Program Director. Repeatable (99).

RDG 510 Foundations of Reading Instruction 3(3-0)
Fall, Spring.
Basic course for other graduate reading courses, including reading skills, sequence, materials, psychology of reading and relationship to other language arts.
Prerequisites: RDG 355 or RDG 555.
Corequisites: None.
Registration Information: Admission to School of Education.

RDG 511 Advanced Methods of Teaching Writing 2(2-0)
As Needed.
Focuses on advanced methods of teaching writing for P-12 students; 30 hrs. field work required.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to the School of Education required. Successful completion of RDG 555 and RDG 510 strongly recommended.

RDG 535 Advanced Disciplinary Literacy 3(3-0)
As Needed.
Focuses on advanced skills and strategies to help students read, write, speak, listen, and view as a professional within their discipline area. Field experience required.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education or graduate status.

RDG 550 Advanced Reading Assessment & Intervention 3(3-0)
As Needed.
Advanced methods of research-based assessment and instruction of reading, to include the five components of reading and best practices for reading intervention.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education or graduate status. Completion of RDG 555 highly recommended.

RDG 555 Advanced Linguistics for Educators 3(3-0)
Fall, Spring.
Focus on linguistics, the study of the English language, particularly the subtopics of phonology, orthography, morphology, semantics, syntax, and pragmatics.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Graduate standing.

RDG 560 Practicum (1-12 V)
As Needed.
Reading practicum in a setting appropriate for graduate level reading students.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (24).

RDG 591 Special Topics (1-3 V)
As Needed.
Special topics in reading.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (30).

RDG 594 Field Experience (1-12 V)
As Needed.
Field experience in an educational setting related to reading and teaching reading.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate standing. Repeatable (99).

RDG 595 Independent Study (1-6 V)
As Needed.
Independent Study.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate standing.

Character Education & Social Emotional Learning, Post-Baccalaureate Certificate

Specific Admission Requirements

Bachelor's degree from a regionally accredited institution.

Student Learning Outcomes

1. Students will develop their unique philosophy as an educator by exploring their "Why."

2. Students will be prepared to take a leadership position in their school's Positive Behavioral Interventions and Supports program.

3. Students will develop a plan to motivate the students in their classes to have a good attitude.

4. Students will develop leadership skills needed for administration (e.g. department head).

Specific Program Requirements

Please Note: This certificate will be awarded directly from the School of Education and will not be noted on CSU Pueblo's Official or Unofficial Transcripts.

Candidates must complete 18 credit hours of Character Education & Social Emotional Learning from Jim Place Services from the list of approved ED 501 courses in Extended Studies as shown below.

Course	Title	Credits
ED 501: Are You a Character Educator?		3
ED 501: Bullying Prevention Strategies for Your Classroom		3
ED 501: Character Education Internship		3
ED 501: Creating Your Own Philosophy of Teaching		3
ED 501: Mental Health in Schools		3
ED 501: Reaching & Teaching At-Risk Students		3
ED 501: Responsible Use of Technology in the Classroom		3
ED 501: Service Learning Examples for the Classroom		3
ED 501: Social-Emotional Learning in the Classroom		3
ED 501: Successful Implementing SEL in Schools		3
ED 501: Teaching Positive Attitude to Students		3

Early Childhood Education, Bachelor of Science

The early childhood education program at CSU Pueblo is focused on teaching children from birth through age 8. We offer two four-year degree programs (both bachelor of science): one with Director Qualification and one with K-3 licensure. Students will acquire a strong foundation in child development and education through a combination of engaging courses and practical field work.

Program Goals

At CSU Pueblo, teacher education is a campus-wide responsibility, and overall program goals reflect components of both a breadth and depth of knowledge of the liberal arts and the pedagogical skills to transform this knowledge into curriculum and instruction for young children.

Expected Student Learning Outcomes

Upon completion of the Bachelor of Science degree in Early Childhood Education, students will:

1. Acquire a broad knowledge of the liberal arts and sciences including an understanding of the significant ideas, concepts, structures and values within disciplines and mastering content knowledge in all areas taught in early childhood education: the arts, math, literature and language, social sciences, sciences, and child development and learning.
2. Construct knowledge through critical and analytical thinking, independent thinking, reasoned judgment, mature values, and imagination.
3. Communicate knowledge by effectively writing in academic and practical formats, speaking in a variety of settings, and utilizing technology as a tool for communication.
4. Apply knowledge by using multiple representations and explanations of disciplinary concepts; using different viewpoints, theories, "ways of knowing,' and methods of inquiry in the teaching of subject matter content; evaluating curriculum for comprehensiveness, accuracy, and usefulness; engaging students in generating knowledge and testing hypotheses through inquiry; developing and using curricula that encourage students to see and interpret ideas from diverse perspectives; and creating interdisciplinary learning experiences.

Outcomes Assessment Activities

The knowledge and skills of students in the Early Childhood Education major are assessed at three points in their program: admission to education, during the semester prior to the capstone term (student teaching or practicum), and at program completion. Assessment activities include the faculty's review of:

1. performance documented in students' eportfolios;
2. scores on standardized tests of general education and content knowledge;
3. ratings of proficiency on program standards by PK-3 classroom teachers, University faculty, and student teacher or practicum supervisors based on direct observation;
4. self-evaluations/ ratings of proficiency on program standards by program completers and graduates one year after teaching; and
5. ratings of proficiency by PK-3 supervisors after graduates have been employed for one year.

Specific Program Requirements

Program Overview

Course	Title	Credits
General Education		35
Major Requirements		67

Electives	18
Total Credits	**120**

Requirements for admission and retention in the School of Education are included in the description of the *School of Education* section of 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.

Course	Title	Credits
General Education Requirements		
General Education Skill Requirements:		
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
MATH 109	Mathematical Explorations (GT-MA1)	3
or MATH 156	Introduction to Statistics (GT-MA1)	
General Education Knowledge Requirements:		
ART 100	Visual Dynamics (GT-AH1)	3
CID 103	Speaking & Listening	3
or CID 221	Interpersonal Communication	
ENG 130	Introduction to Literature (GT-AH2)	3
GEOG 103	World Regional Geography (GT-SS2)	3
HIST 201	U.S. History I (GT-HI1)	3
PSYC 151	Human Development (GT-SS3)	3
Natural & Physical Sciences w/Labs		8
Major Requirements		
ECE 101	Introduction to Early Childhood Ed	3
ECE 102	Intro to ECE Lab Techniques	3
ECE 103	Guidance Strat for Young Children	3
ECE 111	Infant & Toddler Theory & Practice	3
ECE 205	Nutrition, Health and Safety	3
ECE 241	Admin: Human Relations for ECE	3
ECE 350	Programs for ECE	3
ECE 355	Play & Creative Expression in ECE	3
ECE 420	Involving Diverse Families in ECE	3
ECE 425	Intro to EC Spec Ed	3
ECE 430	Teaching Young CLD Children	3
ECE 440	Effective Instr in Early Literacy	3
ECE 493	Seminar	3
ECE 498	Internship	9
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology	3
ED 301	Frameworks of Teaching	4
ED 351	Children's Literature	3
MUS 118	Music Appreciation (GT-AH1)	3
POLS 101	American Government (GT-SS1)	3
Electives		18
Total Credits		**120**

Early Childhood Education, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in Early Childhood Education. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Learning Outcomes

To prepare individuals for Colorado Teacher licensure in Early Childhood Education.

Special Program Requirements

Course	Title	Credits
CID 103	Speaking & Listening	3
ECE 101	Introduction to Early Childhood Ed	3
ECE 102	Intro to ECE Lab Techniques	3
ECE 103	Guidance Strat for Young Children	3
ECE 111	Infant & Toddler Theory & Practice	3
ECE 205	Nutrition, Health and Safety	3
ECE 241	Admin: Human Relations for ECE	3
ECE 485	Capstone in ECE	1
ECE 486	Student Teaching in ECE	12
ECE 520	Adv Mthds Involving Div Fam in ECE	3
ECE 525	Practices in EC Special Education	3
ECE 530	Adv Mthds of Tchg CLD Children	3
ECE 550	Adv Exploration of Programs for ECE	3
ECE 555	Advanced Play & Creativity in ECE	3
ECE 560	Adv Management of ECE Classrooms	2
ECE 561	Adv Mthds of Tchg ECE Soc Stud	2
ECE 563	Adv Mthds of Tchg ECE Math	2
ECE 564	Adv Mthds of Tchg ECE Science	2
ED 202	Foundations of Education	3
ED 351	Children's Literature	3
ED 520	Educational Media and Technology	3
ED 560	Professional Develop in Curriculum & Instruction	4
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
MATH 109	Mathematical Explorations (GT-MA1)	3
PSYC 151	Human Development (GT-SS3)	3
RDG 510	Foundations of Reading Instruction	3
RDG 511	Advanced Methods of Teaching Writing	2
RDG 555	Advanced Linguistics for Educators	3
Total Credits		**90**

Early Childhood Education: K-3 Teacher Preparation Concentration, Bachelor of Science

Students completing a major in Early Childhood Education with Director Qualification & K-3 Licensure are required to complete a minor in

education and meet all other requirements outlined by the Teacher Education Program.

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.

The early childhood education program at CSU Pueblo is focused on teaching children from birth through age 8. We offer two four-year degree programs (both bachelor of science): one with Director Qualification and one with K-3 licensure. Students will acquire a strong foundation in child development and education through a combination of engaging courses and practical field work.

Program Goals

At CSU Pueblo, teacher education is a campus-wide responsibility, and overall program goals reflect components of both a breadth and depth of knowledge of the liberal arts and the pedagogical skills to transform this knowledge into curriculum and instruction for young children.

Expected Student Learning Outcomes

Upon completion of the Bachelor of Science degree in Early Childhood Education, students will:

1. Acquire a broad knowledge of the liberal arts and sciences including an understanding of the significant ideas, concepts, structures and values within disciplines and mastering content knowledge in all areas taught in early childhood education: the arts, math, literature and language, social sciences, sciences, and child development and learning.
2. Construct knowledge through critical and analytical thinking, independent thinking, reasoned judgment, mature values, and imagination.
3. Communicate knowledge by effectively writing in academic and practical formats, speaking in a variety of settings, and utilizing technology as a tool for communication.
4. Apply knowledge by using multiple representations and explanations of disciplinary concepts; using different viewpoints, theories, "ways of knowing,' and methods of inquiry in the teaching of subject matter content; evaluating curriculum for comprehensiveness, accuracy, and usefulness; engaging students in generating knowledge and testing hypotheses through inquiry; developing and using curricula that encourage students to see and interpret ideas from diverse perspectives; and creating interdisciplinary learning experiences.

Outcomes Assessment Activities

The knowledge and skills of students in the Early Childhood Education major are assessed at three points in their program: admission to education, during the semester prior to the capstone term (student teaching or practicum), and at program completion. Assessment activities include the faculty's review of:

1. performance documented in students' eportfolios;
2. scores on standardized tests of general education and content knowledge;
3. ratings of proficiency on program standards by PK-3 classroom teachers, University faculty, and student teacher or practicum supervisors based on direct observation;
4. self-evaluations/ ratings of proficiency on program standards by program completers and graduates one year after teaching; and
5. ratings of proficiency by PK-3 supervisors after graduates have been employed for one year.

Specific Program Requirements

Program Overview

Course	Title	Credits
General Education		35
Core Requirements		35
Concentration Requirements		53
Minor Requirements		40
Total Credits		**163**

General Education Requirements

Course	Title	Credits
Skill Requirements		
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
MATH 109	Mathematical Explorations (GT-MA1)	3
Knowledge Requirements		
ART 100 & BIOL 100L	Visual Dynamics (GT-AH1) and Principles of Biology Lab (GT-SC1)	4
BIOL 100	Principles of Biology (GT-SC2)	3
CID 103	Speaking & Listening	3
ENG 130	Introduction to Literature (GT-AH2)	3
GEOG 103	World Regional Geography (GT-SS2)	3
GEOL 101 & 101L	Earth Science (GT-SC2) and Earth Science Lab (GT-SC1)	4
PSYC 151	Human Development (GT-SS3)	3
HIST 201	U.S. History I (GT-HI1)	3
Total Credits		**35**

Specific Requirements for the Early Childhood Education Teaching Endorsement/Minor

CSU-Pueblo requires the student interested in Early Childhood Education to complete a major in Early Childhood Education and all of the courses listed below.

Course	Title	Credits
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology	3
ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
ECE 460	Managing ECE Classrooms [1]	2
ECE 461	Teaching ECE Social Studies [1]	2
ECE 462	Teaching ECE Reading [1]	3
ECE 463	Teaching ECE Math [1]	2
ECE 464	Teaching ECE Science [1]	2

ECE 485	Capstone in ECE	1
ECE 486	Student Teaching in ECE	12
Total Credits		**34**

[1] GPA of 2.6 required.

Specific Concentration Requirements

Course	Title	Credits
ECE 101	Introduction to Early Childhood Ed	3
ECE 102	Intro to ECE Lab Techniques	3
ECE 103	Guidance Strat for Young Children	3
ECE 111	Infant & Toddler Theory & Practice	3
ECE 205	Nutrition, Health and Safety	3
ECE 241	Admin: Human Relations for ECE	3
ECE 350	Programs for ECE	3
ECE 355	Play & Creative Expression in ECE	3
ECE 420	Involving Diverse Families in ECE	3
ECE 425	Intro to EC Spec Ed	3
ECE 430	Teaching Young CLD Children	3
ECE 460	Managing ECE Classrooms	2
ED 351	Children's Literature	3
MATH 360	Elementary Mathematics Concepts I	3
MATH 361	Elementary Mathematics Concepts II	3
MUS 118	Music Appreciation (GT-AH1)	3
POLS 101	American Government (GT-SS1)	3
RDG 355	Linguistics for Educators	3
Total Credits		**53**

Specific Requirements for the Secondary and K-12 Teaching Endorsements/Minor

The student must complete an appropriate major and the following Education courses:

Course	Title	Credits
Select one of the following:		3
PSYC 151	Human Development (GT-SS3)	3
PSYC 251	Childhood and Adolescence	3
PSYC 342	Educational Psychology	3
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology [2]	3
ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
RDG 435	Disciplinary Literacy [3, 5]	4
Special Methods in Endorsement Areas (Prerequisites - Admission to Education) [5]		4
ED 412	Teaching Diverse Learners [4, 5]	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
or ED 489	Student Teaching K-12	
Total Credits [3]		37-40

[1] Music students may take PSYC 151 Human Development (GT-SS3) (3 c.h.)or PSYC 251 Childhood and Adolescence (3 c.h.).

[2] Music Education students may complete MUS 103 Music and Computer Technology I (1 c.h.) and MUS 306 Technology for Music Educators (2 c.h.) for ED 280 Educational Media and Technology (3 c.h.).

[3] English/Language Arts student must also complete RDG 410 Teaching Reading (3 c.h.)

[4] Physical Education students may complete EPER 465 Adapted Physical Education (3 c.h.) or ED 412 Teaching Diverse Learners (3 c.h.).

[5] GPA of 2.6 required

Education: Art Education Concentration, Master of Education

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 concentration 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 Admission Policies & 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 cumulative GPA. Conditional admission may be granted for candidates with cumulative GPAs lower than 2.500, but whose recent graduate GPA (at least 15 hours) is above 3.000
- A letter of interest that outlines the candidate's reason(s) for applying to the M.Ed. program and how they expect to both benefit from and contribute to it.
- Two recommendations from Individuals who can speak to potential success in graduate school.
- Significant teaching experience. Candidates must provide documentation of the quantity and quality of this experience within their letter of interest.

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 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 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 and program director, in accordance with published deadlines during the semester is to occur. The deadline for submission is published in the *Semester Notes*, *University Calendar*, and *CSU Pueblo Catalog*.

Graduate Program Goals & 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 concentration area 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.

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, & 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 PRAXIS 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.

Specific Program 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 concentration 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, concentration in interpreting and conducting research is included.

Although courses in Components 2 and 3 may be completed by teachers, degree plus or senior students who have been admitted to the Teacher Education Program and meet the 2.600 GPA requirements, admission to all Core courses requires full admission to the graduate program.

Course Requirements

Course	Title	Credits
ED 502	Teacher As Change Agent (Core 1)	3
ED 503	Teacher as Researcher (Core 2)	3
ED 504	Leading Change in America's Schools (Core 3)	3
ED 593	Seminar	2
or ED 581	Practicum & Seminar in Education	
Total Credits		**11**

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 concentration 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:

Course	Title	Credits
Select 3 credits, samples include the following		3
ED 520	Educational Media and Technology	3

ED 523	Teaching & Managing Technology	3
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 570	The Technology Coordinator	3
ED 571	Distance Learning	3
ED 591	Special Topics	1-3
Total Credits		**3**

Differentiation of Instruction

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

Course	Title	Credits
Select 3 credits from any differentiation course, including the following:		3
CLDE 503	Content Instruction for EL Learners	3
ED 512	Teaching Diverse Learners	3
ED 531	Diverse Learners & Technology	3
Total Credits		**3**

Literacy Education

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

Course	Title	Credits
Select 3 credits from any literacy course, including the following:		3
CLDE 520	Literacy for Eng Lang Learners	3
ED 529	Literacy & Technology	3
RDG 535	Advanced Disciplinary Literacy	3
RDG 550	Advanced Reading Assessment & Intervention	3
Total Credits		**3**

Component 3: Concentration 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 concentration areas. Some areas require prerequisites, and an concentration area should be chosen with the advisement of their graduate advisor.

It is the philosophy of the Art Education concentration 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. The concentration requires completion of eighteen hours of graduate level art courses including one graduate level course in art history.

Program Overview

Course	Title	Credits
Core Requirements		11
Pedagogy Requirements		9
Concentration Area Requirements		18
Total Credits		**38**

Education: Curriculum & Instruction Concentration, Master of Education

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 concentration 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 Admission Policies & 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 cumulative GPA. Conditional admission may be granted for candidates with cumulative GPAs lower than 2.500, but whose recent graduate GPA (at least 15 hours) is above 3.000
- A letter of interest that outlines the candidate's reason(s) for applying to the M.Ed. program and how they expect to both benefit from and contribute to it.
- Two recommendations from Individuals who can speak to potential success in graduate school.
- Significant teaching experience. Candidates must provide documentation of the quantity and quality of this experience within their letter of interest.

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 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 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 and program director, in accordance with published deadlines during the semester is to occur. The deadline for submission is published in the *Semester Notes*, *University Calendar*, and *CSU Pueblo Catalog*.

Graduate Program Goals & 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 conecentration area 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.

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 & 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 PRAXIS 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.

Specific Program 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 concentration 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, concentration in interpreting and conducting research is included.

Although courses in Components 2 and 3 may be completed by teachers, degree plus or senior students who have been admitted to the Teacher Education Program and meet the 2.600 GPA requirements, admission to all Core courses requires full admission to the graduate program.

Course Requirements

Course	Title	Credits
ED 502	Teacher As Change Agent (Core 1)	3
ED 503	Teacher as Researcher (Core 2)	3
ED 504	Leading Change in America's Schools (Core 3)	3
ED 593	Seminar	2
or ED 581	Practicum & Seminar in Education	
Total Credits		**11**

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 concentration 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:

Course	Title	Credits
Select 3 credits, samples include the following		3
ED 520	Educational Media and Technology	3
ED 523	Teaching & Managing Technology	3
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 570	The Technology Coordinator	3
ED 571	Distance Learning	3
ED 591	Special Topics	1-3
Total Credits		**3**

Differentiation of Instruction

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

Course	Title	Credits
Select 3 credits from any differentiation course, including the following:		3
CLDE 503	Content Instruction for EL Learners	3
ED 512	Teaching Diverse Learners	3
ED 531	Diverse Learners & Technology	3
Total Credits		**3**

Literacy Education

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

Course	Title	Credits
Select 3 credits from any literacy course, including the following:		3
CLDE 520	Literacy for Eng Lang Learners	3
ED 529	Literacy & Technology	3
RDG 535	Advanced Disciplinary Literacy	3
RDG 550	Advanced Reading Assessment & Intervention	3
Total Credits		**3**

Component 3: Concentration 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 concentration areas. Some areas require prerequisites, and an concentration area should be chosen with the advisement of their graduate advisor.

The concentration in Curriculum & Instruction is designed to increase knowledge about curriculum, teaching, learning, teacher education, and teacher as change agent. It helps prepare teachers to meet the challenges facing modern education, such as diverse and changing social, cultural, economic, and physical environments. Candidates will choose their courses in conjunction with an advisor to create a program that is tailored to individual's needs and interests.

Program Overview

Course	Title	Credits
Core Requirements		11
Pedagogy Requirements		9
Concentration Area Requirements		18
Total Credits		**38**

Education: Early Childhood Education Concentration, Master of Education

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 concentration 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 Admission Policies & 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 cumulative GPA. Conditional admission may be granted for candidates with cumulative GPAs lower than 2.500, but whose recent graduate GPA (at least 15 hours) is above 3.000
- A letter of interest that outlines the candidate's reason(s) for applying to the M.Ed. program and how they expect to both benefit from and contribute to it.
- Two recommendations from Individuals who can speak to potential success in graduate school.
- Significant teaching experience. Candidates must provide documentation of the quantity and quality of this experience within their letter of interest.

International students whose native language is not English must also meet the English language proficiency standard set forth in the *Graduate Studies* 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 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 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 and program director, in accordance with published deadlines during the semester is to occur. The deadline for submission is published in the *Semester Notes*, *University Calendar*, and *CSU Pueblo Catalog*.

Graduate Program Goals & 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 concentration area 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.

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, & 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 PRAXIS 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.

Specific Program 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 concentration 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, concentration in interpreting and conducting research is included.

Although courses in Components 2 and 3 may be completed by teachers, degree plus or senior students who have been admitted to the Teacher Education Program and meet the 2.600 GPA requirements, admission to all Core courses requires full admission to the graduate program.

Course Requirements

Course	Title	Credits
ED 502	Teacher As Change Agent (Core 1)	3
ED 503	Teacher as Researcher (Core 2)	3
ED 504	Leading Change in America's Schools (Core 3)	3
ED 593	Seminar	2
or ED 581	Practicum & Seminar in Education	
Total Credits		**11**

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 concentration 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:

Course	Title	Credits
Select 3 credits, samples include the following		3
ED 520	Educational Media and Technology	3
ED 523	Teaching & Managing Technology	3
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 570	The Technology Coordinator	3
ED 571	Distance Learning	3
ED 591	Special Topics	1-3
Total Credits		**3**

Differentiation of Instruction

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

Course	Title	Credits
Select 3 credits from any differentiation course, including the following:		3
CLDE 503	Content Instruction for EL Learners	3
ED 512	Teaching Diverse Learners	3
ED 531	Diverse Learners & Technology	3
Total Credits		**3**

Literacy Education

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

Course	Title	Credits
Select 3 credits from any literacy course, including the following:		3
CLDE 520	Literacy for Eng Lang Learners	3
ED 529	Literacy & Technology	3
RDG 535	Advanced Disciplinary Literacy	3
RDG 550	Advanced Reading Assessment & Intervention	3
Total Credits		**3**

Component 3: Concentration 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 concentration areas. Some areas require prerequisites, and an concentration area should be chosen with the advisement of their graduate advisor.

Course	Title	Credits
ECE 520	Adv Mthds Involving Div Fam in ECE	3
ECE 525	Practices in EC Special Education	3
ECE 530	Adv Mthds of Tchg CLD Children	3
ECE 540	Adv Mthds of Effect Inst Early Lit	3
ECE 550	Adv Exploration of Programs for ECE	3
ECE 555	Advanced Play & Creativity in ECE	3
ECE 560	Adv Management of ECE Classrooms	2
ECE 561	Adv Mthds of Tchg ECE Soc Stud	2
ECE 562	Adv Mthds of Tchg ECE Reading	3
ECE 563	Adv Mthds of Tchg ECE Math	2
ECE 564	Adv Mthds of Tchg ECE Science	2
Total Credits		**29**

Additional courses with an Early Childhood Education focus may be added with approval of the graduate advisor. Students completing this area should confer with their advisor if they wish to select courses leading to teacher licensure in Early Childhood Education.

Program Overview

Course	Title	Credits
Core Requirements		11
Pedagogy Requirements		9
Concentration Area Requirements		18
Total Credits		**38**

Education: Early Learning Concentration, Master of Education

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 concentration 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 Admission Policies & 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 cumulative GPA. Conditional admission may be granted for candidates with cumulative GPAs lower than 2.500, but whose recent graduate GPA (at least 15 hours) is above 3.000
- A letter of interest that outlines the candidate's reason(s) for applying to the M.Ed. program and how they expect to both benefit from and contribute to it.
- Two recommendations from Individuals who can speak to potential success in graduate school.
- Significant teaching experience. Candidates must provide documentation of the quantity and quality of this experience within their letter of interest.

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 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 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 and program director, in accordance with published deadlines during the semester is to occur. The deadline for submission is published in the *Semester Notes*, *University Calendar*, and *CSU Pueblo Catalog*.

Graduate Program Goals & 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 concentration area 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.

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.

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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.
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Performance Standards, Program Alignment, & 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.
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- 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.

Specific Program 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 concentration 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, concentration in interpreting and conducting research is included.

Although courses in Components 2 and 3 may be completed by teachers, degree plus or senior students who have been admitted to the Teacher Education Program and meet the 2.600 GPA requirements, admission to all Core courses requires full admission to the graduate program.

Course Requirements

Course	Title	Credits
ED 502	Teacher As Change Agent (Core 1)	3
ED 503	Teacher as Researcher (Core 2)	3
ED 504	Leading Change in America's Schools (Core 3)	3
ED 593	Seminar	2
or ED 581	Practicum & Seminar in Education	
Total Credits		**11**

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 concentration 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:

Course	Title	Credits
Select 3 credits, samples include the following		3
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ED 523	Teaching & Managing Technology	3
ED 529	Literacy & Technology	3
ED 531	Diverse Learners & Technology	3
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ED 533	Instructional Theory & Tech Design	3
ED 534	Multimedia Design	3
ED 536	Technology & Assessment Tools	3
ED 570	The Technology Coordinator	3
ED 571	Distance Learning	3
ED 591	Special Topics	1-3
Total Credits		**3**

Differentiation of Instruction

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

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Total Credits		**3**

Literacy Education

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

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CLDE 520	Literacy for Eng Lang Learners	3
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RDG 535	Advanced Disciplinary Literacy	3
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Component 3: Concentration 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 concentration areas. Some areas require prerequisites, and an concentration area should be chosen with the advisement of their graduate advisor.

Course	Title	Credits
ED 510	Collaboration in Education	3
ED 524	Advanced Techniques of Teaching Elementary Social	2
ED 525	Advanced Techniques of Teaching Elementary Science	2
ED 580	Integrated Methods	3
RDG 510	Foundations of Reading Instruction	3
RDG 511	Advanced Methods of Teaching Writing	2
RDG 550	Advanced Reading Assessment & Intervention	3
Total Credits		**18**

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

Program Overview

Course	Title	Credits
Core Requirements		11
Pedagogy Requirements		9
Concentration Area Requirements		18
Total Credits		**38**

Education: Educational Leadership Concentration, Master of Education

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 concentration 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.

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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.

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

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

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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.

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1. Demonstrate growth in content knowledge related to concentration area 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.
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Component 1: Core Requirements (11 hours)

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ED 504	Leading Change in America's Schools (Core 3)	3
ED 593	Seminar	2
or ED 581	Practicum & Seminar in Education	
Total Credits		**11**

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 concentration areas and the Pedagogy Core.

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

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ED 523	Teaching & Managing Technology	3
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 570	The Technology Coordinator	3
ED 571	Distance Learning	3
ED 591	Special Topics	1-3
Total Credits		**3**

Differentiation of Instruction

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

Course	Title	Credits
Select 3 credits from any differentiation course, including the following:		3
CLDE 503	Content Instruction for EL Learners	3
ED 512	Teaching Diverse Learners	3
ED 531	Diverse Learners & Technology	3
Total Credits		**3**

Literacy Education

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

Course	Title	Credits
Select 3 credits from any literacy course, including the following:		3
CLDE 520	Literacy for Eng Lang Learners	3
ED 529	Literacy & Technology	3
RDG 535	Advanced Disciplinary Literacy	3
RDG 550	Advanced Reading Assessment & Intervention	3
Total Credits		**3**

Component 3: Concentration Area Requirements (18 hours in one area)

The purpose of Component 3 of this program is the development of knowledge and skills related to educational leadership, with a focus on becoming a P-12 principal. The 27 credit hours shown below include all courses required for principal licensure, where ED 602, ED 604, and ED 606 meet the requirements of component 2 of the M.Ed. with a concentration in Principal Licensure. The remaining 18 credit hours constitute the formal concentration.

Course	Title	Credits
All courses below are required for principal licensure. Only 18 credits are needed for the concentration.		
ED 600	Introduction to Educational Leadership	3
ED 601	Shaping Organizations: Leadership & Management	3
ED 602	Legal & Financial Dimensions of School Leadership (Meets Literacy course requirement of Pedagogy Component)	3
ED 603	External Environments in Leadership	3
ED 604	Educator Development, Supervision, & Evaluation (Meets Differentiation course requirement under Pedagogy Component)	3
ED 605	The Principalship: Leadership at the Site Level	3
ED 606	Technology & Site-Level, Data-Driven Decisions (Meets Instructional Technology course requirement under Pedagogy Component)	3
ED 698	Internship in Educational Leadership	6
Total Credits		**27**

Additional courses in Educational Leadership may be substituted with approval of the graduate advisor.

Course	Title	Credits
Core Requirements		11
Pedagogy Requirements		9
Concentration Area Requirements		27
Total Credits		**47**

Education: English Concentration, Master of Education

The concentration in English helps develop teachers of English and Language Arts by expanding their proficiency and understanding of language, literature, linguistics, and other issues in the field. As with other discipline-specific courses, this concentration helps individuals meet credentialing expectations for concurrent enrollment and other higher education courses.

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 concentration 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 Admission Policies & 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 cumulative GPA. Conditional admission may be granted for candidates with cumulative GPAs lower than 2.500, but whose recent graduate GPA (at least 15 hours) is above 3.000
- A letter of interest that outlines the candidate's reason(s) for applying to the M.Ed. program and how they expect to both benefit from and contribute to it.
- Two recommendations from Individuals who can speak to potential success in graduate school.
- Significant teaching experience. Candidates must provide documentation of the quantity and quality of this experience within their letter of interest.

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 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 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 and program director, in accordance with published deadlines during the semester is to occur. The deadline for submission is published in the *Semester Notes*, *University Calendar*, and *CSU Pueblo Catalog*.

Graduate Program Goals & 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 concentration area 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.

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, & 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 PRAXIS 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.

Specific Program 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 concentration 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, concentration in interpreting and conducting research is included.

Although courses in Components 2 and 3 may be completed by teachers, degree plus or senior students who have been admitted to the Teacher Education Program and meet the 2.600 GPA requirements, admission to all Core courses requires full admission to the graduate program.

Course Requirements

Course	Title	Credits
ED 502	Teacher As Change Agent (Core 1)	3
ED 503	Teacher as Researcher (Core 2)	3
ED 504	Leading Change in America's Schools (Core 3)	3
ED 593	Seminar	2
or ED 581	Practicum & Seminar in Education	
Total Credits		**11**

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 concentration 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:

Course	Title	Credits
Select 3 credits, samples include the following		3
ED 520	Educational Media and Technology	3
ED 523	Teaching & Managing Technology	3
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 570	The Technology Coordinator	3
ED 571	Distance Learning	3
ED 591	Special Topics	1-3
Total Credits		**3**

Differentiation of Instruction

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

Course	Title	Credits
Select 3 credits from any differentiation course, including the following:		3
CLDE 503	Content Instruction for EL Learners	3
ED 512	Teaching Diverse Learners	3
ED 531	Diverse Learners & Technology	3
Total Credits		**3**

Literacy Education

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

Course	Title	Credits
Select 3 credits from any literacy course, including the following:		3
CLDE 520	Literacy for Eng Lang Learners	3
ED 529	Literacy & Technology	3
RDG 535	Advanced Disciplinary Literacy	3
RDG 550	Advanced Reading Assessment & Intervention	3
Total Credits		**3**

Component 3: Concentration 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 concentration areas. Some areas require prerequisites, and an concentration area should be chosen with the advisement of their graduate advisor.

Program Overview

Course	Title	Credits
Core Requirements		11
Pedagogy Requirements		9
Concentration Area Requirements		18
Total Credits		**38**

Education: Gifted Education Concentration, Master of Education

Graduate Admission Policies & 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 cumulative GPA. Conditional admission may be granted for candidates with cumulative GPAs lower than 3.000.
- A letter of interest that outlines the candidate's reason(s) for applying to the M.Ed. program and how they expect to both benefit from and contribute to it.
- Two recommendations from individuals who can speak to potential success in graduate school.
- 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 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 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 and program director, in accordance with published deadlines during the semester is to occur. The deadline for submission is published in the *Semester Notes*, *University Calendar*, and *CSU-Pueblo Catalog*.

Student Learning Outcomes

- Educators of gifted learners demonstrate an understanding of the array of unique needs and development of those learners by creating inclusive learning environments with effective curriculum and instruction, including culturally and linguistically diverse considerations.
- Educators of gifted learners follow best practices in the identification and assessment of those learners and make data-driven decisions about program improvement.
- Educators of gifted learners demonstrate professionalism through ethical conduct, reflection, collaboration, and communication.

Specific Program 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 concentration 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, concentration in interpreting and conducting research is included.

Although courses in Components 2 and 3 may be completed by teachers, degree plus or senior students who have been admitted to the Teacher Education Program and meet the 2.600 GPA requirements, admission to all Core courses requires full admission to the graduate program.

Course Requirements

Course	Title	Credits
ED 502	Teacher As Change Agent (Core 1)	3
ED 503	Teacher as Researcher (Core 2)	3
ED 504	Leading Change in America's Schools (Core 3)	3
ED 593	Seminar	2
or ED 581	Practicum & Seminar in Education	
Total Credits		**11**

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 concentration 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:

Course	Title	Credits
Select 3 credits, samples include the following		3
ED 520	Educational Media and Technology	3
ED 523	Teaching & Managing Technology	3
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 570	The Technology Coordinator	3
ED 571	Distance Learning	3
ED 591	Special Topics	1-3
Total Credits		**3**

Differentiation of Instruction

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

Course	Title	Credits
Select 3 credits from any differentiation course, including the following:		3
CLDE 503	Content Instruction for EL Learners	3
ED 512	Teaching Diverse Learners	3
ED 531	Diverse Learners & Technology	3
Total Credits		**3**

Literacy Education

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

Course	Title	Credits
Select 3 credits from any literacy course, including the following:		3
CLDE 520	Literacy for Eng Lang Learners	3
ED 529	Literacy & Technology	3
RDG 535	Advanced Disciplinary Literacy	3
RDG 550	Advanced Reading Assessment & Intervention	3
Total Credits		**3**

Component 3: Concentration Area Requirements (18 hours in one area)

The purpose of Component 3 of this program is the development of knowledge and skills related to gifted education, with a focus on adding the Gifted Education Core (ages 4-21) endorsement to a Colorado teaching license. The 24 credit hours shown below include all courses required for the added endorsement, where ED 611 and ED 612 meet the Pedagogy Requirements (Component 2) of Differentiation of Instruction and Instructional Technology, respectively. The remaining 18 credit hours constitute the formal concentration.

Course	Title	Credits
All courses below are required for the added endorsement of Gifted Education Core (ages 4-21). Only 18 credits are needed for the concentration.		18
ED 610	Gifted Learner Development	3
ED 611	Learning Environments for Gifted Learners	3
ED 612	Instructional Strategies for Gifted Learners	3
ED 613	Curriculum for Gifted Learners	3
ED 614	Assessment & Evaluation in Gifted Education	3
ED 615	Foundations & Ethics in Gifted Education	3
ED 616	Collaboration & Communication in Gifted Education	3
ED 681	Practicum in Gifted Education	3

Additional courses in Gifted Education may be substituted with approval of the Program Director.

Program Overview

Course	Title	Credits
Core Requirements		11
Pedagogy Requirements		9
Concentration Area Requirements		18
Total Credits		**38**

Education: Health & Physical Education Concentration, Master of Education

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 concentration 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 Admission Policies & 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 cumulative GPA. Conditional admission may be granted for candidates with cumulative GPAs lower than 2.500, but whose recent graduate GPA (at least 15 hours) is above 3.000
- A letter of interest that outlines the candidate's reason(s) for applying to the M.Ed. program and how they expect to both benefit from and contribute to it.

- Two recommendations from Individuals who can speak to potential success in graduate school.
- Significant teaching experience. Candidates must provide documentation of the quantity and quality of this experience within their letter of interest.

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 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 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 and program director, in accordance with published deadlines during the semester is to occur. The deadline for submission is published in the *Semester Notes*, *University Calendar*, and *CSU Pueblo Catalog*.

Graduate Program Goals & 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 concentration area 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.

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, & 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 PRAXIS 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.

Specific Program 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 concentration 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, concentration in interpreting and conducting research is included.

Although courses in Components 2 and 3 may be completed by teachers, degree plus or senior students who have been admitted to the Teacher Education Program and meet the 2.600 GPA requirements, admission to all Core courses requires full admission to the graduate program.

Course Requirements

Course	Title	Credits
ED 502	Teacher As Change Agent (Core 1)	3
ED 503	Teacher as Researcher (Core 2)	3
ED 504	Leading Change in America's Schools (Core 3)	3
ED 593	Seminar	2
or ED 581	Practicum & Seminar in Education	
Total Credits		**11**

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 concentration 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:

Course	Title	Credits
Select 3 credits, samples include the following		3
ED 520	Educational Media and Technology	3
ED 523	Teaching & Managing Technology	3
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 570	The Technology Coordinator	3
ED 571	Distance Learning	3
ED 591	Special Topics	1-3
Total Credits		**3**

Differentiation of Instruction

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

Course	Title	Credits
Select 3 credits from any differentiation course, including the following:		3

CLDE 503	Content Instruction for EL Learners	3
ED 512	Teaching Diverse Learners	3
ED 531	Diverse Learners & Technology	3
Total Credits		**3**

Literacy Education

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

Course	Title	Credits
Select 3 credits from any literacy course, including the following:		3
CLDE 520	Literacy for Eng Lang Learners	3
ED 529	Literacy & Technology	3
RDG 535	Advanced Disciplinary Literacy	3
RDG 550	Advanced Reading Assessment & Intervention	3
Total Credits		**3**

Component 3: Concentration 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 concentration areas. Some areas require prerequisites, and an concentration area should be chosen with the advisement of their graduate advisor.

Course	Title	Credits
EPER 522	Methods of Elementary Physical Education	3
EPER 549	Facilitation of Adventure Education	3
EPER 562	Contemporary Issues In Hpe	3
EPER 565	Adapted Physical Education	3
EPER 578	Methods of Secondary School PE	3
HS 536	Community & Global Health Application	3
Total Credits		**18**

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.

Program Overview

Course	Title	Credits
Core Requirements		11
Pedagogy Requirements		9
Concentration Area Requirements		18
Total Credits		**38**

Education: Instructional Technology Concentration, Master of Education

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 concentration 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 Admission Policies & 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 cumulative GPA. Conditional admission may be granted for candidates with cumulative GPAs lower than 2.500, but whose recent graduate GPA (at least 15 hours) is above 3.000
- A letter of interest that outlines the candidate's reason(s) for applying to the M.Ed. program and how they expect to both benefit from and contribute to it.
- Two recommendations from Individuals who can speak to potential success in graduate school.
- Significant teaching experience. Candidates must provide documentation of the quantity and quality of this experience within their letter of interest.

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 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 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 and program director, in accordance with published deadlines during the semester is to occur. The deadline for submission is published in the *Semester Notes*, *University Calendar*, and *CSU Pueblo Catalog*.

Graduate Program Goals & 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 concentration area 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.

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, & 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 PRAXIS 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.

Specific Program 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 concentration 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, concentration in interpreting and conducting research is included.

Although courses in Components 2 and 3 may be completed by teachers, degree plus or senior students who have been admitted to the Teacher Education Program and meet the 2.600 GPA requirements, admission to all Core courses requires full admission to the graduate program.

Course Requirements

Course	Title	Credits
ED 502	Teacher As Change Agent (Core 1)	3
ED 503	Teacher as Researcher (Core 2)	3
ED 504	Leading Change in America's Schools (Core 3)	3
ED 593	Seminar	2
or ED 581	Practicum & Seminar in Education	
Total Credits		**11**

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 concentration 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:

Course	Title	Credits
Select 3 credits, samples include the following		3
ED 520	Educational Media and Technology	3
ED 523	Teaching & Managing Technology	3
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 570	The Technology Coordinator	3
ED 571	Distance Learning	3
ED 591	Special Topics	1-3
Total Credits		**3**

Differentiation of Instruction

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

Course	Title	Credits
Select 3 credits from any differentiation course, including the following:		3
CLDE 503	Content Instruction for EL Learners	3
ED 512	Teaching Diverse Learners	3
ED 531	Diverse Learners & Technology	3
Total Credits		**3**

Literacy Education

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

Course	Title	Credits
Select 3 credits from any literacy course, including the following:		3
CLDE 520	Literacy for Eng Lang Learners	3
ED 529	Literacy & Technology	3
RDG 535	Advanced Disciplinary Literacy	3
RDG 550	Advanced Reading Assessment & Intervention	3
Total Credits		**3**

Component 3: Concentration 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 concentration areas. Some areas require prerequisites, and an concentration area should be chosen with the advisement of their graduate advisor.

Course	Title	Credits
ED 523	Teaching & Managing Technology	3
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 570	The Technology Coordinator	3
ED 571	Distance Learning	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 and K-12 Instructional Technology Specialists.

Program Overview

Course	Title	Credits
Core Requirements		11
Pedagogy Requirements		9
Concentration Area Requirements		18
Total Credits		**38**

Education: Linguistically Diverse Concentration, Master of Education

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 concentration 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 Admission Policies & 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 cumulative GPA. Conditional admission may be granted for candidates with cumulative GPAs lower than 2.500, but whose recent graduate GPA (at least 15 hours) is above 3.000
- A letter of interest that outlines the candidate's reason(s) for applying to the M.Ed. program and how they expect to both benefit from and contribute to it.
- Two recommendations from Individuals who can speak to potential success in graduate school.
- Significant teaching experience. Candidates must provide documentation of the quantity and quality of this experience within their letter of interest.

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 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 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 and program director, in accordance with published deadlines during the semester is to occur. The deadline for submission is published in the *Semester Notes*, *University Calendar*, and *CSU Pueblo Catalog*.

Graduate Program Goals & 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 concentration area 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.

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, & 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 PRAXIS 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.

Specific Program 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 concentration 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, concentration in interpreting and conducting research is included.

Although courses in Components 2 and 3 may be completed by teachers, degree plus or senior students who have been admitted to the Teacher Education Program and meet the 2.600 GPA requirements, admission to all Core courses requires full admission to the graduate program.

Course Requirements

Course	Title	Credits
ED 502	Teacher As Change Agent (Core 1)	3
ED 503	Teacher as Researcher (Core 2)	3
ED 504	Leading Change in America's Schools (Core 3)	3
ED 593	Seminar	2
or ED 581	Practicum & Seminar in Education	
Total Credits		**11**

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 concentration 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:

Course	Title	Credits
Select 3 credits, samples include the following		3
ED 520	Educational Media and Technology	3
ED 523	Teaching & Managing Technology	3
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 570	The Technology Coordinator	3
ED 571	Distance Learning	3
ED 591	Special Topics	1-3
Total Credits		**3**

Differentiation of Instruction

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

Course	Title	Credits
Select 3 credits from any differentiation course, including the following:		3
CLDE 503	Content Instruction for EL Learners	3
ED 512	Teaching Diverse Learners	3
ED 531	Diverse Learners & Technology	3
Total Credits		**3**

Literacy Education

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

Course	Title	Credits
Select 3 credits from any literacy course, including the following:		3
CLDE 520	Literacy for Eng Lang Learners	3
ED 529	Literacy & Technology	3
RDG 535	Advanced Disciplinary Literacy	3
RDG 550	Advanced Reading Assessment & Intervention	3
Total Credits		**3**

Component 3: Concentration 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 concentration areas. Some areas require prerequisites, and an concentration area should be chosen with the advisement of their graduate advisor.

Course	Title	Credits
CLDE 501	Graduate Topics in Culturally & Ling. Div. Ed.	3
CLDE 503	Content Instruction for EL Learners	3
CLDE 520	Literacy for Eng Lang Learners	3
CLDE 560	Ling Div Assess & Admin	3
CLDE 581	Practicum with English Learners	1-6
ENG 523	Syntax for TESL/TEFL	3
ENG 553	Language in the USA	3

Additional courses in linguistics and world 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.

Program Overview

Course	Title	Credits
Core Requirements		11
Pedagogy Requirements		9
Concentration Area Requirements		18
Total Credits		**38**

Education: Music Education Concentration, Master of Education

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 concentration 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 Admission Policies & 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 cumulative GPA. Conditional admission may be granted for candidates with cumulative GPAs lower than 2.500, but whose recent graduate GPA (at least 15 hours) is above 3.000
- A letter of interest that outlines the candidate's reason(s) for applying to the M.Ed. program and how they expect to both benefit from and contribute to it.
- Two recommendations from Individuals who can speak to potential success in graduate school.
- Significant teaching experience. Candidates must provide documentation of the quantity and quality of this experience within their letter of interest.

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 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 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 and program director, in accordance with published deadlines during the semester is to occur. The deadline for submission is published in the *Semester Notes*, *University Calendar*, and *CSU Pueblo Catalog*.

Graduate Program Goals & 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 concentration area 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.

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:

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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.
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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:

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

Specific Program 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 concentration 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, concentration in interpreting and conducting research is included.

Although courses in Components 2 and 3 may be completed by teachers, degree plus or senior students who have been admitted to the Teacher Education Program and meet the 2.600 GPA requirements, admission to all Core courses requires full admission to the graduate program.

Course Requirements

Course	Title	Credits
ED 502	Teacher As Change Agent (Core 1)	3
ED 503	Teacher as Researcher (Core 2)	3
ED 504	Leading Change in America's Schools (Core 3)	3
ED 593	Seminar	2
or ED 581	Practicum & Seminar in Education	
Total Credits		**11**

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 concentration 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:

Course	Title	Credits
Select 3 credits, samples include the following		3
ED 520	Educational Media and Technology	3
ED 523	Teaching & Managing Technology	3
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 570	The Technology Coordinator	3
ED 571	Distance Learning	3
ED 591	Special Topics	1-3
Total Credits		**3**

Differentiation of Instruction

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

Course	Title	Credits
Select 3 credits from any differentiation course, including the following:		3
CLDE 503	Content Instruction for EL Learners	3
ED 512	Teaching Diverse Learners	3
ED 531	Diverse Learners & Technology	3
Total Credits		**3**

Literacy Education

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

Course	Title	Credits
Select 3 credits from any literacy course, including the following:		3
CLDE 520	Literacy for Eng Lang Learners	3
ED 529	Literacy & Technology	3
RDG 535	Advanced Disciplinary Literacy	3
RDG 550	Advanced Reading Assessment & Intervention	3
Total Credits		**3**

Component 3: Concentration 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 concentration areas. Some areas require prerequisites, and an concentration area should be chosen with the advisement of their graduate advisor.

18 hours of MUS 500-level credit must be earned to complete the Music concentration portion of the Master of Education degree. No more than 4 hours of 500-level ensemble credit or applied music credit may be applied toward the Master of Education-Music concentration. In addition to 18 hours of 500 level MUS credit completed, students must demonstrate completion of the following courses or the comparable undergraduate course listed below:

Course	Title	Credits
MUS 530	Marching Band (1-2 semesters as required by instrument)	0.5,1
MUS 230	Marching Band	0.5,1
MUS 430	Marching Band	0.5,1
MUS 579	Graduate Recital (or Junior Recital)	2
or MUS 345	Junior Lecture Recital	
MUS 550	Instrumental Conducting	2
or MUS 560	Choral Conducting	
or MUS 359	Advanced Conducting	
MUS 513	Advanced Vocal Pedagogy	1
or MUS 113	Vocal Techniques and Diction	
MUS 523	Advanced Percussion Pedagogy	1
or MUS 223	Percussion Techniques	
MUS 533	Advanced String Pedagogy	1
or MUS 243	String Techniques	
MUS 543	Advanced Woodwind Pedagogy	1
or MUS 233	Woodwind Techniques	
MUS 553	Advanced Brass Pedagogy	1
or MUS 253	Brass Techniques	
MUS 580	Advanced General Music Methods	2
or MUS 340	General Music Methods	
MUS 581	Advanced Choral Methods	2
or MUS 440	Choral Music Methods	
MUS 582	Advanced Instrumental Methods	2
or MUS 441	Instrumental Music Methods	

Education: Principal Licensure, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure as a K-12 Principal. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution.

Goals

To prepare individuals for Colorado Teacher K-12 Principal licensure.

Specific Program Requirements

Principal Licensure (27 credit hours)

The purpose of this post-baccalaureate certificate is to be endorsed as a K-12 principal. The 27 credit hours shown below include all courses required for principal licensure. This certificate can be paired with a M.Ed. in Educational Leadership for those who are interested.

Course	Title	Credits
All courses below are required for principal licensure.		
ED 600	Introduction to Educational Leadership	3
ED 601	Shaping Organizations: Leadership & Management	3
ED 602	Legal & Financial Dimensions of School Leadership	3
ED 603	External Environments in Leadership	3
ED 604	Educator Development, Supervision, & Evaluation	3
ED 605	The Principalship: Leadership at the Site Level	3
ED 606	Technology & Site-Level, Data-Driven Decisions	3
ED 698	Internship in Educational Leadership	6
Total Credits		**27**

Any course substitutions or transfer credit must be approved by the Director of the School of Education.

Education: Reading, Language, & Literacy Concentration, Master of Education

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 concentration 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 Admission Policies & 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 cumulative GPA. Conditional admission may be granted for candidates with cumulative GPAs lower than 2.500, but whose recent graduate GPA (at least 15 hours) is above 3.000
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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 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 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.
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Graduate Program Goals & 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 concentration area 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.**

2. 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.

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***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.**

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

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

6. 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.

7. 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.**

8. Demonstrate responsibility for student learning at high levels.

9. Demonstrate responsibility for school reform and leadership in school change.

Specific Program Requirements

The degree is designed with three components:

1. core courses in research and professional change;
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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.

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Total Credits		**11**

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

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ED 531	Diverse Learners & Technology	3
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ED 534	Multimedia Design	3
ED 536	Technology & Assessment Tools	3
ED 570	The Technology Coordinator	3
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ED 591	Special Topics	1-3
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Differentiation of Instruction

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

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Course	Title	Credits
18 credit hours from among these (or other approved) options:		
CLDE 520	Literacy for Eng Lang Learners	3
ECE 540	Adv Mthds of Effect Inst Early Lit	3
ECE 562	Adv Mthds of Tchg ECE Reading	3
RDG 510	Foundations of Reading Instruction	3
RDG 511	Advanced Methods of Teaching Writing	2
RDG 535	Advanced Disciplinary Literacy	3
RDG 550	Advanced Reading Assessment & Intervention	3
RDG 555	Advanced Linguistics for Educators	3
RDG 560	Practicum	2
RDG 591	Special Topics	1-3
RDG 595	Independent Study	1-6

Program overview

Course	Title	Credits
Core Requirements		11
Pedagogy Requirements		9
Concentration Area Requirements		18
Total Credits		**38**

Education: Space Studies for Educators Concentration, Master of Education

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Program Completer Self-Evaluation

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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.

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1. core courses in research and professional change;
2. pedagogy courses in literacy, differentiation of instruction, and technology; and
3. courses in an concentration 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, concentration in interpreting and conducting research is included.

Although courses in Components 2 and 3 may be completed by teachers, degree plus or senior students who have been admitted to the Teacher Education Program and meet the 2.600 GPA requirements, admission to all Core courses requires full admission to the graduate program.

Course Requirements

Course	Title	Credits
ED 502	Teacher As Change Agent (Core 1)	3
ED 503	Teacher as Researcher (Core 2)	3
ED 504	Leading Change in America's Schools (Core 3)	3
ED 593	Seminar	2
or ED 581	Practicum & Seminar in Education	
Total Credits		**11**

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 concentration 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:

Course	Title	Credits
Select 3 credits, samples include the following		3
ED 520	Educational Media and Technology	3
ED 523	Teaching & Managing Technology	3
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 570	The Technology Coordinator	3
ED 571	Distance Learning	3
ED 591	Special Topics	1-3
Total Credits		**3**

Differentiation of Instruction

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

Course	Title	Credits
Select 3 credits from any differentiation course, including the following:		3
CLDE 503	Content Instruction for EL Learners	3
ED 512	Teaching Diverse Learners	3
ED 531	Diverse Learners & Technology	3
Total Credits		**3**

Literacy Education

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

Course	Title	Credits
Select 3 credits from any literacy course, including the following:		3
CLDE 520	Literacy for Eng Lang Learners	3
ED 529	Literacy & Technology	3
RDG 535	Advanced Disciplinary Literacy	3
RDG 550	Advanced Reading Assessment & Intervention	3
Total Credits		**3**

Component 3: Concentration 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 concentration areas. Some areas require prerequisites, and an concentration area should be chosen with the advisement of their graduate advisor.

Course	Title	Credits
ED 574	Early Childhood Space Exploration	3
ED 575	Lunar/Mars Exploration	3
ED 576	Rocketry & Exploration	3
ED 577	Astronomy for the Classroom	3
ED 578	Long Term Space Travel	3
ED 579	Earth Systems Science	3
Total Credits		**18**

Additional courses with a Space Studies focus may be added with approval of the graduate advisor.

Education: Special Education Concentration, Master of Education

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 concentration 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 Admission Policies & 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 cumulative GPA. Conditional admission may be granted for candidates with cumulative GPAs lower than 2.500, but whose recent graduate GPA (at least 15 hours) is above 3.000
- A letter of interest that outlines the candidate's reason(s) for applying to the M.Ed. program and how they expect to both benefit from and contribute to it.
- Two recommendations from Individuals who can speak to potential success in graduate school.

- Significant teaching experience. Candidates must provide documentation of the quantity and quality of this experience within their letter of interest.

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 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 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 and program director, in accordance with published deadlines during the semester is to occur. The deadline for submission is published in the *Semester Notes*, *University Calendar*, and *CSU Pueblo Catalog*.

Graduate Program Goals & 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 concentration area 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.

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, & 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 PRAXIS 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.

Specific Program 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 concentration 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, concentration in interpreting and conducting research is included.

Although courses in Components 2 and 3 may be completed by teachers, degree plus or senior students who have been admitted to the Teacher Education Program and meet the 2.600 GPA requirements, admission to all Core courses requires full admission to the graduate program.

Course Requirements

Course	Title	Credits
ED 502	Teacher As Change Agent (Core 1)	3
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ED 504	Leading Change in America's Schools (Core 3)	3
ED 593	Seminar	2
or ED 581	Practicum & Seminar in Education	
Total Credits		**11**

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

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Instructional Technology

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

Course	Title	Credits
Select 3 credits, samples include the following		3
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ED 523	Teaching & Managing Technology	3
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 570	The Technology Coordinator	3
ED 571	Distance Learning	3
ED 591	Special Topics	1-3
Total Credits		**3**

Differentiation of Instruction

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

Course	Title	Credits
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CLDE 503	Content Instruction for EL Learners	3
ED 512	Teaching Diverse Learners	3

ED 531	Diverse Learners & Technology	3
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Component 3: Concentration 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 concentration areas. Some areas require prerequisites, and an concentration area should be chosen with the advisement of their graduate advisor.

Course	Title	Credits
ED 512	Teaching Diverse Learners	3
ED 531	Diverse Learners & Technology	3
RDG 550	Advanced Reading Assessment & Intervention	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
ED 581	Practicum & Seminar in Education	1-6

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.

Education: World Language Concentration, Master of Education

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

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.

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

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

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Follow-Up Assessments

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The degree is designed with three components:

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ED 593	Seminar	2
or ED 581	Practicum & Seminar in Education	
Total Credits		**11**

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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 concentration areas and the Pedagogy Core.

Instructional Technology

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ED 523	Teaching & Managing Technology	3
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 570	The Technology Coordinator	3
ED 571	Distance Learning	3
ED 591	Special Topics	1-3
Total Credits		**3**

Differentiation of Instruction

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

Course	Title	Credits
Select 3 credits from any differentiation course, including the following:		3

CLDE 503	Content Instruction for EL Learners	3
ED 512	Teaching Diverse Learners	3
ED 531	Diverse Learners & Technology	3
Total Credits		**3**

Literacy Education

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

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CLDE 520	Literacy for Eng Lang Learners	3
ED 529	Literacy & Technology	3
RDG 535	Advanced Disciplinary Literacy	3
RDG 550	Advanced Reading Assessment & Intervention	3
Total Credits		**3**

Component 3: Concentration 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 concentration areas. Some areas require prerequisites, and an concentration area should be chosen with the advisement of their graduate advisor.

Educational Leadership, Doctor of Education

Doctor of Educational Leadership

The Ed.D. in Educational Leadership at CSU Pueblo is designed to provide a practice-based doctoral degree for educational leaders who wish to advance their knowledge and skills to address the critical issues and challenges that exist in the field of education. To meet the rural, regional, and national need for highly-qualified educational leaders, this program will be offered online. The unique design of this program recognizes the application of leadership in the daily work of educators in P-12 or higher education.

Specific Admission Requirements

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

- A master's degree & Principal Licensure (or master's plus 3 years of professional experience).
- A letter of interest that outlines the candidate's reason(s) for applying to the Ed.D. program and how they expect to both benefit from and contribute to it.
- Two recommendations from Individuals who can speak to potential success in this doctoral program.

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 Goals & Student Learning Outcomes

1. Completers are transformative leaders who engage with complex perspectives to strategically promote inclusive, non-oppressive school contexts that serve the best interests of students, families, and communities for a more equitable and socially-just education system and society.
2. Completers are reflective practitioners who seek and embrace critical feedback with the personal insight necessary to continuously improve and are willing to fully dedicate their knowledge, skills, and passion towards becoming critically conscious scholars, researchers, and change agents.
3. Completers are critical consumers of knowledge that base leadership and professional practice as a leader and scholar on historical and cultural awareness, ethics, and professionalism for the communities served.
4. Completers are academic scholars who are able to design and implement scientific inquiry for the development of new knowledge and data-driven decisions to improve practice.
5. Completers are advocates who have the necessary tools for the design, planning, communication, implementation, and assessment of current or proposed policy and how to engage with appropriate entities for effective change.

Outcomes Assessment Activities

The assessment plan for Colorado State University-Pueblo's Ed.D. 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. Student outcomes and tasks aligned with professional program standards.
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, including all of the following:

- Developing curriculum plans.
- Self-reflection/evaluation.
- Mentored supervision and evaluation of work in the field.
- Case study analysis and response.

- Teacher-constructed exams and quizzes.
- Materials and artifacts from community and parent outreach included in the electronic portfolio.
- Research-based papers, position statements, presentations, etc.
- School change plan.
- Policy brief critiques and memos.
- Developing school culture plan.
- Developing a distributed leadership plan.
- Quantitative & qualitative research studies.
- Dissertation on a topic related to educational leadership

Graduate students begin developing their electronic portfolio with their first course. Faculty will review materials and communicate their feedback to the student. Documents that demonstrate their performance on specific standards are added throughout the program.

Program Completion. Completion of a written dissertation, public presentation of dissertation, and private defense of dissertation to student's advisory committee.

Program Completer Self-Evaluation. At the end of their final course, students will complete a self-evaluation of their performance across program standards and an evaluation of the quality of the program.

Specific Program Requirements

Students enter with a Master's degree & Principal Licensure (or Master's plus 3 years related experience).

Course	Title	Credits
Leadership Core (24 credit hours)		
ED 710	Contemporary Theories in Leadership	3
ED 711	Issues in Educational Leadership	3
ED 712	Ethics in Educational Leadership	3
ED 713	Strategic Change in Education	3
ED 714	Policy Analysis & Advocacy for Change	3
ED 715	Developing Organizational Culture	3
ED 716	Advanced Inquiry & Analysis in Education	3
ED 717	Distributed Leadership & Organizational Structures	3
Research Core (9 credit hours)		
ED 720	Quantitative Research in Education	3
ED 721	Qualitative Research in Education	3
ED 722	Data-Driven Leadership	3
Electives (9 credit hours from among these or other approved options)		
ED 730	Contracts & Negotiation	3
ED 731	Economics of Human Resources	3
ED 732	Advanced Law & Administration	3
Doctoral Practicum (4 credit hours throughout program)		
ED 898	Doctoral Practicum in Educational Leadership	4
Dissertation (12 credit hours throughout program)		
ED 899	Dissertation Research	12
Total Credits		**58**

Specific Graduation Requirements

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

- 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 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 (58 credit hours).
- Completion of a written dissertation, public presentation of dissertation, and private defense of dissertation to student's advisory committee.
- Submission of a graduation planning sheet signed by the student's graduate advisor and program director, in accordance with published deadlines during the semester is to occur. The deadline for submission is published in the *Semester Notes*, *University Calendar*, and *CSU Pueblo Catalog*.

Elementary Education: K-6 Teacher Preparation Concentration, Bachelor of Science

The Elementary Education 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 *Content Standards*. Students are required to select an area of concentration or concentration for an additional 15 hours of study. Areas of concentration may be chosen from Art, English, Health, Language and Linguistics, Math, Modern World Languages, Music, Science, and Social Studies.

Students completing a major in Elementary Education are required to complete a minor in education and meet all other requirements outlined by the School of Education.

Program Goals

At CSU Pueblo, teacher education is a campus wide responsibility, and overall program goals reflect components of both the Elementary Education major and Education minor. It is the purpose of the Elementary Education 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.

Program Design

The program is planned as a coherent whole, with four components:

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.

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. concentration is placed on each area relative to K-6

content standards to assure depth of knowledge in the humanities, social sciences, math, and sciences.

Area of Emphasis in a Specific Discipline

Students are required to select an area of emphasis within which they will study an additional 15 credit hours. Areas of emphasis may be chosen from Art, English, Health, Language and Linguistics, Math, Modern World Languages, Music, Reading, Science, Social Studies and Special Education.

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 *School of Education* section: *Specific Requirements for the Elementary Teaching Endorsement*. Education has special requirements for admission and retention. Please refer to *School of Education* section: *Admission to the School of Education* and *Retention.*

Expected Student Learning Outcomes

It is the joint responsibility of both the major and minor to prepare future teachers to evaluate information critically, to study and research independently, and to communicate knowledge effectively. The following four program goals have been established for the Elementary Education Degree. Goal 1 is largely the responsibility of the Elementary Education major and Goal 4 the responsibility of the Elementary Education minor; benchmarks for Goals 2 and 3 have been designed across the entire degree program.

1. Acquisition of Knowledge. Graduates are broadly educated in the liberal arts and sciences:
    - Understanding the significant ideas, concepts, structures and values within disciplines, including theoretical, ethical, and practical implications.
    - Mastering content knowledge in all areas taught in elementary schools: the arts, math literature and language, social sciences, sciences, and human development and learning.
    - Balancing a breadth of knowledge in the liberal arts and sciences with depth of knowledge within a discipline.
2. Construction of Knowledge. Graduates demonstrate habits of thinking, including analytical skills, independent thinking, reasoned judgment, mature values, and imagination:
    - Utilizing the tools of inquiry of the humanities, arts, mathematics, and behavioral, social, and natural sciences to understand and evaluate ideas.
    - Developing habits of critical intellectual inquiry, including self-direction and self-reflection.
    - Making connections from different intellectual perspectives and multiple viewpoints to form cross-disciplinary connections.
    - Utilizing research skills of the liberal arts and sciences, including library and data retrieval skills, to study and evaluate information.
3. Communication of Knowledge. Graduates communicate effectively:
    - Writing clearly in a variety of academic and practical formats.
    - Speaking effectively in a variety of settings.
    - Utilizing technology as a tool to inform and communicate.
4. Application of Knowledge. Graduates create standards-based learning experiences that make knowledge accessible, exciting, and meaningful for all students:
    - Using multiple representations and explanations of disciplinary concepts that capture key ideas and link them to students' prior understandings.
    - Using different viewpoints, theories, "ways of knowing,' and methods of inquiry in teaching of subject matter content.
    - Evaluating curriculum for their comprehensiveness, accuracy, and usefulness for representing particular ideas and concepts.
    - Engaging students in generating knowledge and testing hypotheses according to the methods of inquiry and standards of evidence used in the discipline
    - Developing and using curricula that encourage students to see and interpret ideas from diverse perspectives.
    - Creating interdisciplinary learning experiences that allow inquiry from several subject areas.

Outcomes Assessment Activities

The knowledge and skills of students in the Elementary Education major are assessed at three points in their program: admission to education, admission to student teaching, and during the student teaching semester (program completion). Assessment activities include the faculty's review of:

1. Performance documented in students' eportfolios;
2. Scores on standardized tests of general education and content knowledge;
3. Ratings of proficiency on program standards by K-12 classroom teachers, University faculty, and student teacher supervisors based on direct observation of teaching;
4. Self-evaluations/ ratings of proficiency on program standards by program completers and graduates one year after teaching; and
5. Ratings of proficiency by K-12 supervisors after graduates have taught for one year.

Standardized tests completed by students in Elementary Education include the Educational Testing Service's (ETS) *Proficiency Profile* and all *Praxis* exams required by the Colorado Department of Education.

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,

1. Formal assessments at the sophomore (e.g., Proficiency Profile) and senior level (PRAXIS Exams),
2. Faculty recommendations of student progress,
3. Portfolio assessment, and
4. 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.

Specific Program Requirements

Program Overview

Course	Title	Credits
General Education Requirements		35-37
Elementary Education Core Requirements		34
Required Emphasis in Discipline Area		15
Elementary Education Requirements		40
Total Credits		**124-126**

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 Pueblo is required for admission to student teaching.

General Education Requirements

Course	Title	Credits
General Education Requirements		
Genearl Education Skill Requirements		
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
Select one of the following:		3-5
MATH 101	Introductory College Mathematics (GT-MA1)	3
MATH 109	Mathematical Explorations (GT-MA1)	3
MATH 156	Introduction to Statistics (GT-MA1)	3
MATH 120	College Algebra (GT-MA1)	3
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
General Education Knowledge Requirements:		
BIOL 100 & 100L	Principles of Biology (GT-SC2) and Principles of Biology Lab (GT-SC1)	4
CID 103	Speaking & Listening	3
ENG 130	Introduction to Literature (GT-AH2)	3
GEOG 103	World Regional Geography (GT-SS2)	3
GEOL 101 & 101L	Earth Science (GT-SC2) and Earth Science Lab (GT-SC1)	4
PSYC 151	Human Development (GT-SS3)	3
ART 100	Visual Dynamics (GT-AH1)	3
or MUS 118	Music Appreciation (GT-AH1)	
HIST 110	World History to 1500 (GT-HI1)	3
or HIST 111	World History since 1500 (GT-HI1)	
Total Credits		**35-37**

Specific Core Requirements

Course	Title	Credits
Elementary Education Core Requirements		
ENGLISH:		
ED 351	Children's Literature	3
ENG 303	Advanced Rhetoric & Writing	3
HISTORY:		
HIST 201	U.S. History I (GT-HI1)	3
or HIST 202	U.S. History II (GT-HI1)	
FINE ARTS:		
ART 100	Visual Dynamics (GT-AH1) (select the course not completed for General Education)	3
or MUS 118	Music Appreciation (GT-AH1)	
MATH:		
MATH 360	Elementary Mathematics Concepts I	3
MATH 361	Elementary Mathematics Concepts II	3
MATH 362	Problem Solving for K-6 Teachers	3
MULTICULTURAL STUDIES:		
CS 420	Voices of Protest (Other approved multicultural courses may be added)	3
READING:		
RDG 355	Linguistics for Educators	3
SCIENCE:		
PHYS/CHEM 150	Elementary Concepts in Phys & Chem	4
SOCIAL SCIENCE:		
POLS 101	American Government (GT-SS1)	3
Required Emphasis in Discipline Area		
Select one emphasis from the list below.		15
Elementary Education Requirements		
Elementary Education credits listed below.		40
Total Credits		**89**

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 emphasis areas.

Required Emphasis in Discipline Area

Students are required to select one of the following emphasis areas of 15 hours. All students should meet with an advisor and develop the goals to be achieved by completion of the emphasis and the sequence of courses to achieve the goals. Many options may lead to an added teaching endorsement.

Art

Course	Title	Credits
ARH 211	Global Art I (GT-AH1)	3
ARH 212	Global Art II (GT-AH1)	3
Studio Art Course		3
Art courses numbered 300 or above		6
Total Credits		**15**

Early Childhood Education

Course	Title	Credits
Select 15 credits from the following:		15
ECE 101	Introduction to Early Childhood Ed	3
ECE 102	Intro to ECE Lab Techniques	3
ECE 103	Guidance Strat for Young Children	3
ECE 111	Infant & Toddler Theory & Practice	3
ECE 205	Nutrition, Health and Safety	3
ECE 241	Admin: Human Relations for ECE	3
ECE 355	Play & Creative Expression in ECE	3
ECE 420	Involving Diverse Families in ECE	3
ECE 425	Intro to EC Spec Ed	3
ECE 430	Teaching Young CLD Children	3

ECE 440	Effective Instr in Early Literacy	3
ECE 460	Managing ECE Classrooms	2
ECE 461	Teaching ECE Social Studies	2
ECE 462	Teaching ECE Reading	3
ECE 463	Teaching ECE Math	2
ECE 464	Teaching ECE Science	2
Total Credits		**15**

English

Course	Title	Credits
Select 15 hours, 6 hours of which must be in courses numbered 300 or above		15
Total Credits		**15**

Health

Course	Title	Credits
EPER 162	Personal Health	3
EPER 162L	Personal Health Lab	1
EPER 201	Drugs and Healthy Lifestyles	3
AT 232	First Aid	2
BIOL 112	Nutrition	3
Select one of the following:		3
HS 330	Epidemiology & Disease Prevention	3
HS 336	Community and Global Health	3
HS 430	Public Health Program Planning	3
Total Credits		**15**

Language & Linguistics

Course	Title	Credits
CID 260	Language Acquisition & Linguistics	3
ENG 352	English Syntax and Usage	3
CLDE 401	Teaching English Language Learners	3
Electives in Language/Linguistics		6
Total Credits		**15**

Math

Course	Title	Credits
MATH 120	College Algebra (GT-MA1)	3
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 156	Introduction to Statistics (GT-MA1)	3
Approved Electives in Math		4
Total Credits		**15**

Modern World Language

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

French

Course	Title	Credits
Select 15 credits in FRN courses		15
Total Credits		**15**

Italian

Course	Title	Credits
Select 15 credits in ITL courses		15
Total Credits		**15**

Spanish

Course	Title	Credits
Select 15 credits in SPN courses		15
Total Credits		**15**

Music

Course	Title	Credits
MUS 150	Music Theory I	3
MUS 210	Music Theory II	3
MUS 118	Music Appreciation (GT-AH1) (if taken as core course, 3 elective hours may be taken)	3
MUS 127	Functional Piano I: Beginning	1
MUS xxx	Applied Music: 3 semesters at 1 credit each - 3 (1+1+1)	3
VARIES	Music Ensemble: 4 ensembles at .5 credits each - 2 (.5 x 4)	2
MUS 101	Music Performance Symposium I (take two semesters)	0
Total Credits		**15**

Reading

Course	Title	Credits
Select 15 credits from the following:		15
CLDE 420	Literacy for Eng Lang Learners	3
ED 429	Literacy & Technology	3
ENG 412	Young Adult Literature	3
RDG 360	Practicum	1-3
RDG 435	Disciplinary Literacy	4
RDG 450	Reading Assessment & Intervention	3
RDG 491	Special Topics	1-2
Total Credits		**15**

Science

Course	Title	Credits
Select One Biology, One Chemistry, and One Physics Course and Labs; examples include:		12
BIOL 121 & 121L	Environmental Conservation (GT-SC2) and Environmental Conservation Lab (GT-SC1)	4
BIOL 181 & 181L	College Biology I/Organismal Bio (GT-SC2) and College Biology I/Organismal Bio Lab (GT-SC1)	4
BIOL 206 & 206L	Introduction to Microbiology and Introduction to Microbiology Lab	4
CHEM 101 & 101L	Chemistry and Society (GT-SC2) and Chemistry and Society Lab (GT-SC1)	4
CHEM 111 & 111L	Principles of Chemistry (GT-SC2) and Principles of Chemistry Lab (GT-SC1)	4
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
PHYS 110 & 110L	Astronomy (GT-SC2) and Astronomy Lab (GT-SC1)	4

PHYS 140 & 140L	Light, Energy, & the Atom (GT-SC2) and Light, Energy and the Atom Lab (GT-SC1)	4
PHYS 201 & 201L	Principles of Physics I (GT-SC2) and Principles of Physics Lab I (GT-SC1)	4
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
GEOL 114	Oceanography	3
or PHYS 110	Astronomy (GT-SC2)	
Total Credits		**15**

Social Studies

Course	Title	Credits
HIST 201	U.S. History I (GT-HI1) (whichever class not completed in core)	3
or HIST 202	U.S. History II (GT-HI1)	
ECON 201	Principles of Macroeconomics (GT-SS1)	3
GEOG 101	Physical Geography	3
Select 6 hours of upper division courses in History, Chicano Studies, or Political Science		6
Total Credits		**15**

Special Education

Course	Title	Credits
Select 15 hours from the following:		15
ED 406	Behavioral Support	3
ED 407	Levels of Support I	3
ED 408	Levels Of Support II	3
ED 409	Levels Of Support III	3
ED 410	Collaboration in Education	3
ED 431	Diverse Learners & Technology [1]	3
ED 445	Assessment & Data Driven Instruction	3
RDG 450	Reading Assessment & Intervention	3
Total Credits		**15**

[1] This course counts toward the emphasis, but is not part of the required 24 credit hours for the Special Education Generalist added endorsement.

Elementary Education Requirements

Specific Requirements for the Elementary Teaching Endorsement/Minor

CSU-Pueblo requires the student interested in Elementary Education to complete a Liberal Studies major in addition to the courses in Education listed below.

Course	Title	Credits
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology	3
ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
ED 380	Integrated Methods in Elementary [1]	3
RDG 410	Teaching Reading [1]	3
RDG 411	Teaching Writing [1]	2
ED 412	Teaching Diverse Learners [1]	3
ED 413	Teaching Elementary Social Studies [1]	2
ED 414	Teaching Elementary Science & Health [1]	2
ED 417	Teaching Mathematics in Elementary School [1]	2
ED 485	Capstone Seminar in Education	1
ED 487	Student Teaching Elementary	12
Total Credits		**40**

[1] GPA of 2.6 required.

K-12 Art, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in K-12 Art. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Learning Outcomes

To prepare individuals for Colorado Teacher licensure in K-12 Art.

Specific Program Requirements

Students pursuing this certificate must meet all requirements of the Teacher Education Program.

Course	Title	Credits
ART 115	Two-Dimensional Design	3
ART 116	Three-Dimensional Design	3
ART 141	Drawing I: Observational Drawing	3
ARH 211	Global Art I (GT-AH1)	3
ARH 212	Global Art II (GT-AH1)	3
ART 234	Painting I	3
ART 242	Drawing II: Life Drawing	3
ART 247	Ceramics I	3
ART 270	Printmaking I	3
ART 276	Photography: Creative Lighting	3
ART 281	Principles of Graphic Design (Upper Div Art History)	3
Upper Div. Art History Course		3
Upper Div. Art Electives		12
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
MATH 109	Mathematical Explorations (GT-MA1)	3
PSYC 151	Human Development (GT-SS3)	3
or PSYC 251	Childhood and Adolescence	
ED 202	Foundations of Education	3
ED 520	Educational Media and Technology	3
ED 560	Professional Develop in Curriculum & Instruction	4
ED 512	Teaching Diverse Learners	3
ED 546	Teaching K-12 Art	3
RDG 535	Advanced Disciplinary Literacy	3
ED 485	Capstone Seminar in Education	1
ED 489	Student Teaching K-12	12

K-12 Culturally & Linguistically Diverse Education, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in K-12 Culturally & Linguistically Diverse Education. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Learning Outcomes

To prepare individuals for Colorado Teacher licensure in K-12 Culturally & Linguistically Diverse Education.

Specific Program Requirements

Students pursuing this certificate must meet all requirements of the Teacher Education Program.

Course	Title	Credits
CLDE 501	Graduate Topics in Culturally & Ling. Div. Ed.	3
CLDE 503	Content Instruction for EL Learners	3
CLDE 520	Literacy for Eng Lang Learners	3
CLDE 560	Ling Div Assess & Admin	3
CLDE 581	Practicum with English Learners	3
ENG 523	Syntax for TESL/TEFL	3
ENG 553	Language in the USA	3
CLDE 530	Language Acquisition & Linguistics	3
Total Credits		**24**

K-12 Instructional Technology, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in K-12 Instructional Technology Education. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Goals

To prepare individuals for Colorado Teacher licensure in K-12 Instructional Technology Education.

Specific Program Requirements

Students pursuing this certificate must meet all requirements of the Teacher Education Program.

Course	Title	Credits
ED 520	Educational Media and Technology	3
ED 523	Teaching & Managing Technology	3
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
Total Credits		**24**

K-12 Music, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in K-12 Music. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Learning Outcomes

To prepare individuals for Colorado Teacher licensure in K-12 Music.

Specific Program Requirements

Students pursuing this certificate must meet all requirements of the Teacher Education Program.

Course	Title	Credits
MUS 150	Music Theory I	3
MUS 151	Aural Skills I	2
MUS 210	Music Theory II	3
MUS 211	Aural Skills II	2
MUS 250	Music Theory III	3
MUS 251	Aural Skills III	2
MUS 280	Music Theory IV	3
MUS 281	Aural Skills IV	2
MUS 305	Music History I	3
MUS 355	Music History II	3
Music Performance Symposium 6 sem.		
Primary Ensemble (6 sem, 2 upper div.)		6
Major Applied Lesson (5 sem.)		10
MUS 229	Piano Proficiency Completion	1
MUS 103	Music and Computer Technology I	1
MUS 306	Technology for Music Educators	2
MUS 357	Orchestration and Arranging	2
MUS 358	Basic Conducting	2
MUS 579	Graduate Recital	2
MUS 550	Instrumental Conducting	2
or MUS 560	Choral Conducting	
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 580	Advanced General Music Methods	2
MUS 581	Advanced Choral Methods	2
MUS 582	Advanced Instrumental Methods	2
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
MATH 109	Mathematical Explorations (GT-MA1)	3
PSYC 151	Human Development (GT-SS3)	3

or PSYC 251	Childhood and Adolescence	
ED 202	Foundations of Education	3
ED 560	Professional Develop in Curriculum & Instruction	4
ED 512	Teaching Diverse Learners	3
RDG 535	Advanced Disciplinary Literacy	3
ED 485	Capstone Seminar in Education	1
ED 489	Student Teaching K-12	6
MUS 594	Field Experience	6
Total Credits		**106**

K-12 Physical Education, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in K-12 Physical Education. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Learning Outcomes

To prepare individuals for Colorado Teacher licensure in K-12 Physical Education.

Specific Program Requirements

Students pursuing this certificate must meet all requirements of the Teacher Education Program.

Course	Title	Credits
AT 232	First Aid	2
AT 260	Injury/Illness Care and Prevention	3
EPER 233	History & Principles of Physical Education & Rec	2
EPER 245	Motor Learning and Development	3
EPER 343	Research and Statistics	3
EPER 344	Exercise Physiology	3
EPER 344L	Exercise Physiology Lab	1
EPER 345	Methods of Physical Activities & Games I	2
EPER 346	Methods Physical Activities & Games II	2
EPER 348	Methods of Individual and Dual Sports	3
EPER 364	Kinesiology	3
BIOL 223	Human Physiology and Anatomy I (GT-SC2)	3
BIOL 223L	Human Physiology and Anatomy I Lab (GT-SC1)	1
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
MATH 109	Mathematical Explorations (GT-MA1)	3
PSYC 151	Human Development (GT-SS3)	3
or PSYC 251	Childhood and Adolescence	
ED 202	Foundations of Education	3
ED 520	Educational Media and Technology	3
ED 560	Professional Develop in Curriculum & Instruction	4
ED 512	Teaching Diverse Learners	3
EPER 522	Methods of Elementary Physical Education	3
EPER 578	Methods of Secondary School PE	3
RDG 535	Advanced Disciplinary Literacy	3
ED 485	Capstone Seminar in Education	1
ED 489	Student Teaching K-12	12
Total Credits		**81**

K-12 Special Education Generalist, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in K-12 Special Education Generalist. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Goals

To prepare individuals for Colorado Teacher licensure in K-12 Special Education Generalist.

Specific Program Requirements

Students pursuing this certificate must meet all requirements of the Teacher Education Program.

Course	Title	Credits
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 512	Teaching Diverse Learners	3
ED 545	Assessment & Data Driven Instruction	3
ED 581	Practicum & Seminar in Education	3
RDG 511	Advanced Methods of Teaching Writing	2
RDG 550	Advanced Reading Assessment & Intervention	3
RDG 555	Advanced Linguistics for Educators	3
Total Credits		**29**

K-12 World Languages - Spanish, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in K-12 World Languages - Spanish. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Learning Outcomes

To prepare individuals for Colorado Teacher licensure in K-12 World Languages - Spanish.

Specific Program Requirements

Students pursuing this certificate must meet all requirements of the Teacher Education Program.

Course	Title	Credits
SPN 101	Beginning Spanish I	3
SPN 102	Beginning Spanish II	3
SPN 201	Intermediate Spanish I (GT-AH4)	3
SPN 202	Intermediate Spanish II (GT-AH4)	3
SPN 203	Intermediate Proficiency Building	3
SPN 301	Spanish Grammar in Context	3

SPN 303	Spanish Phonetics & Phonology	3
or SPN 309	Intro to Hispanic Linguistics	
SPN 370	Intro to Literature & Culture	3
One of the following courses:		3
SPN 312	Conv & Comp: Mexico & Central Amer	3
SPN 313	Conv & Comp: South America	3
SPN 314	Conv & Comp: Caribbean	3
SPN 315	Conv & Comp: Spain	3
SPN 316	Conv & Comp: U.S. Latinx	3
12 hours of upper div. SPN or FL, 6 must be 400-level		12
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
MATH 109	Mathematical Explorations (GT-MA1)	3
PSYC 151	Human Development (GT-SS3)	3
or PSYC 251	Childhood and Adolescence	
ED 202	Foundations of Education	3
ED 520	Educational Media and Technology	3
ED 560	Professional Develop in Curriculum & Instruction	4
ED 512	Teaching Diverse Learners	3
ED 548	Teaching Foreign Language	3
RDG 535	Advanced Disciplinary Literacy	3
ED 485	Capstone Seminar in Education	1
ED 489	Student Teaching K-12	12
Total Credits		**86**

K-6 Elementary Education, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in K-6 Elementary Education. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Learning Outcomes

To prepare individuals for Colorado Teacher licensure in K-6 Elementary Education.

Specific Program Requirements

Course	Title	Credits
ART 100	Visual Dynamics (GT-AH1)	3
BIOL 100 & 100L	Principles of Biology (GT-SC2) and Principles of Biology Lab (GT-SC1)	4
CHEM 150	Elementary Concepts in Phys & Chem	4
or PHYS 150	Elementary Concepts in Phys & Chem	
CID 103	Speaking & Listening	3
ED 202	Foundations of Education	3
ED 351	Children's Literature	3
ED 485	Capstone Seminar in Education	1
ED 487	Student Teaching Elementary	12
ED 512	Teaching Diverse Learners	3
ED 514	Teaching K-6 Math	2
ED 520	Educational Media and Technology	3
ED 524	Advanced Techniques of Teaching Elementary Social	2
ED 525	Advanced Techniques of Teaching Elementary Science	2
ED 560	Professional Develop in Curriculum & Instruction	4
ED 580	Integrated Methods	3
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
ENG 130	Introduction to Literature (GT-AH2)	3
ENG 303	Advanced Rhetoric & Writing	3
GEOG 103	World Regional Geography (GT-SS2)	3
GEOL 101 & 101L	Earth Science (GT-SC2) and Earth Science Lab (GT-SC1)	4
HIST 110	World History to 1500 (GT-HI1)	3
or HIST 111	World History since 1500 (GT-HI1)	
HIST 201	U.S. History I (GT-HI1)	3
or HIST 202	U.S. History II (GT-HI1)	
MATH 109	Mathematical Explorations (GT-MA1)	3
MATH 360	Elementary Mathematics Concepts I	3
MATH 361	Elementary Mathematics Concepts II	3
MUS 118	Music Appreciation (GT-AH1)	3
POLS 101	American Government (GT-SS1)	3
PSYC 151	Human Development (GT-SS3)	3
or PSYC 251	Childhood and Adolescence	
RDG 510	Foundations of Reading Instruction	3
RDG 511	Advanced Methods of Teaching Writing	2
RDG 555	Advanced Linguistics for Educators	3
Total Credits		**103**

Middle School (6-8) Mathematics, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in Middle School Mathematics. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Goals

To prepare individuals for Colorado Teacher licensure in Middle School Mathematics.

Specific Program Requirements

Students pursuing this certificate must meet all requirements of the Teacher Education Program.

Course	Title	Credits
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 207	Matrix and Vector Algebra with Applications	3
MATH 224	Calculus and Analytic Geometry II	5
MATH 319	Number Theory	3
MATH 330	Introduction to Higher Geometry	3
MATH 360	Elementary Mathematics Concepts I	3
MATH 361	Elementary Mathematics Concepts II	3
MATH 362	Problem Solving for K-6 Teachers	3

MATH 463	History of Mathematics	3
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
MATH 156	Introduction to Statistics (GT-MA1)	3
PSYC 151	Human Development (GT-SS3)	3
or PSYC 251	Childhood and Adolescence	
ED 202	Foundations of Education	3
ED 520	Educational Media and Technology	3
ED 560	Professional Develop in Curriculum & Instruction	4
ED 512	Teaching Diverse Learners	3
MATH 577	Concepts in Secondary School Mathematics	4
RDG 535	Advanced Disciplinary Literacy	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
Total Credits		**79**

Middle School Mathematics: 6-8 Teacher Preparation Concentration, Bachelor of Science

The Middle School Mathematics major, which leads to a B.S. degree, is specifically designed to lead to a Colorado teaching license for Middle School Mathematics (grades 6-8). It requires the completion of an Education Minor as well, which will be added to students' programs once they are fully admitted to Education.

Student Learning Outcomes & Assessment Activities

1. Demonstrate a deep understanding of mathematical concepts appropriate for middle school, including algebra, geometry, statistics, probability, and number theory.
2. Apply mathematical reasoning and problem-solving skills to a variety of situations.
3. Communicate mathematical ideas both verbally and in writing using both everyday language and mathematical terminology.
4. Demonstrate proficiency with pedagogical strategies to enhance student engagement and learning.

Specific Program Requirements

Course	Title	Credits
General Education Requirements		
General Education Skill Requirements:		
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
MATH 156	Introduction to Statistics (GT-MA1)	3
General Education Knowledge Requirements:		
Humanities		
CID 103	Speaking & Listening	3
Humanities Electives		6
History		
History Elective		3
Social Sciences		
PSYC 151	Human Development (GT-SS3)	3
Social Sciences Elective		3
Natural Sciences		
Laboratory Science Sequence		10
Major Requirements		
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 207	Matrix and Vector Algebra with Applications	3
MATH 224	Calculus and Analytic Geometry II	5
MATH 319	Number Theory	3
MATH 330	Introduction to Higher Geometry	3
MATH 360	Elementary Mathematics Concepts I	3
MATH 361	Elementary Mathematics Concepts II	3
MATH 362	Problem Solving for K-6 Teachers	3
MATH 463	History of Mathematics	3
Electives in Math/Math Ed		7
Computer Programming		4
Electives		7
Minor Requirements		
Education Minor requirements listed below.		37
Total Credits		**123**

1. Credit hours for this course are counted in ED minor

Specific Requirements for the Secondary and K-12 Teaching Endorsements/Minor

The student must complete an appropriate major and the following Education courses:

Course	Title	Credits
PSYC 151	Human Development (GT-SS3) [1]	3
or PSYC 251	Childhood and Adolescence	
or PSYC 342	Educational Psychology	
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology [2]	3
ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
RDG 355	Linguistics for Educators [3]	3
RDG 435	Disciplinary Literacy [3, 5]	4
Special Methods in Education Areas (Prerequisites - Admission to Education) [5, 6]		4
ED 412	Teaching Diverse Learners [4, 5]	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
or ED 489	Student Teaching K-12	
Total Credits		**37**

1. Music students may take PSYC 151 Human Development (GT-SS3) (3 c.h.) or PSYC 251 Childhood and Adolescence (3 c.h.).
2. Music Education students may complete MUS 103 Music and Computer Technology I (1 c.h.) and MUS 306 Technology for Music Educators (2 c.h.) for ED 280 Educational Media and Technology (3 c.h.).
3. English/Language Arts student must also complete RDG 355 Linguistics for Educators (3 c.h.)

[4] Physical Education students may complete EPER 465 Adapted Physical Education (3 c.h.) or ED 412 Teaching Diverse Learners (3 c.h.).
[5] GPA of 2.6 required
[6] English/Language Arts student must also complete ED 447 Teaching English in Secondary Schools (4 c.h.)

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.

Outcomes Assessment Activities

Assessment activities conducted for the Reading minor include the following: a review of:

1. Scores on standardized tests of content knowledge related to literacy;
2. Ratings of proficiency on program based on performance documented for standards in Goal 2 of students' eportfolios; and
3. Self-evaluations/ratings of proficiency on program outcomes by program completers and graduates one year after teaching.

Specific Program 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. 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 adviser. Many electives are available only in summer sessions.

Course	Title	Credits
Core Course Requirements		
ED 351	Children's Literature	3
or ENG 412	Young Adult Literature	
RDG 355	Linguistics for Educators	3
RDG 410	Teaching Reading	3
RDG 411	Teaching Writing	2
RDG 435	Disciplinary Literacy	4
RDG 450	Reading Assessment & Intervention	3
Electives		
Select 4 credits from the following:		4
CLDE 420	Literacy for Eng Lang Learners	3
ECE 440	Effective Instr in Early Literacy	3
ECE 462	Teaching ECE Reading	3
ED 429	Literacy & Technology	3
RDG 360	Practicum	1-3
RDG 491	Special Topics	1-2
Total Credits		**22**

Secondary & K-12 Education, Minor

The Education Minor is reserved for those undergraduate students pursuing a Colorado teaching license in conjunction with their major. It is a "protected" minor, which means students cannot just add it by themselves. When a student successfully completes our admission course (ED 301), the Education Minor is added to his/her program. The following majors can be paired with an Education Minor:

- Art Creative Media: K-12 Teacher Preparation Concentration, Bachelor of Arts (p. 242)
- Biology: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 406)
- Chemistry: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 437)
- Early Childhood Education: K-3 Teacher Preparation Concentration, Bachelor of Science (p. 129)
- Elementary Education: K-6 Teacher Preparation Concentration, Bachelor of Science (p. 176)
- English: 7-12 Teacher Preparation Concentration, Bachelor of Arts (p. 265)
- Exercise Science, Physical Education, Recreation: K-12 Physical Education Teacher Preparation Concentration, Bachelor of Science (p. 212)
- Exercise Science, Physical Education, Recreation: K-12 Teacher Preparation Concentration 3+2 Plan, Integrated Bachelor of Science/

Master of Education: Health Physical Education Concentration (p. 214)

- History: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 285)
- Mathematics: 7-12 Teacher Preparation Concentration, Bachelor of Arts (p. 462)
- Mathematics: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 463)
- Middle School Mathematics: 6-8 Teacher Preparation, Bachelor of Science (p. 184)
- Music: K-12 Teacher Preparation Concentration, Bachelor of Arts (p. 337)
- Physics: 7-12 Physical Science Teacher Preparation Concentration, Bachelor of Science (p. 465)
- Physics: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 467)
- Political Science: 7-12 Teacher Preparation Concentration, Bachelor of Arts (p. 290)
- Political Science: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 291)
- World Languages-Spanish: K-12 Teacher Preparation Concentration, Bachelor of Arts (p. 269)

The Secondary & K-12 Education Minor is reserved for undergraduate students pursuing a Colorado teaching license in conjunction with their major. It is a "protected" minor, which means students cannot just add it by themselves. When a student successfully completes our admission course (ED 301), the Education Minor is added to his/her program.

Note: If a student is pursuing a Liberal Studies degree, they will have the Education minor added, but will complete the requirements listed under the Elementary Teaching section below. Likewise, if a student is pursuing a Early Childhood Education degree, they will have the Education minor added, but will complete the requirements listed under the Early Childhood Education section below.

Specific Requirements for Secondary & K-12 Education/Minor

The student must complete an appropriate major and the following Education courses:

Course	Title	Credits
PSYC 151	Human Development (GT-SS3) [1]	3
or PSYC 251	Childhood and Adolescence	
or PSYC 342	Educational Psychology	
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology [2]	3
ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
RDG 355	Linguistics for Educators [3]	3
RDG 435	Disciplinary Literacy [5]	4
Special Methods in Education Areas (Prerequisites - Admission to Education) [5, 6]		4
ED 412	Teaching Diverse Learners [4, 5]	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
or ED 489	Student Teaching K-12	
Total Credits		**37**

1. Music students may take PSYC 151 Human Development (GT-SS3) (3 c.h.) or PSYC 251 Childhood and Adolescence (3 c.h.).
2. Music Education students may complete MUS 103 Music and Computer Technology I (1 c.h.) and MUS 306 Technology for Music Educators (2 c.h.) for ED 280 Educational Media and Technology (3 c.h.).
3. English/Language Arts student must also complete RDG 355 Linguistics for Educators (3 c.h.)
4. Physical Education students may complete EPER 465 Adapted Physical Education (3 c.h.) or ED 412 Teaching Diverse Learners (3 c.h.).
5. GPA of 2.6 required
6. English/Language Arts student must also complete ED 447 Teaching English in Secondary Schools (4 c.h.)

For students pursuing a Liberal Studies degree, the below requirements will be completed in place of the Secondary & K-12 Education minor requirements.

Specific Requirements for Elementary Teaching

CSU Pueblo requires the student interested in Elementary Education to complete a Liberal Studies major in addition to the courses listed below, which constitute a minor in Education.

Course	Title	Credits
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology	3
ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
ED 380	Integrated Methods in Elementary [1]	3
RDG 410	Teaching Reading [1]	3
RDG 411	Teaching Writing [1]	2
ED 412	Teaching Diverse Learners [1]	3
ED 413	Teaching Elementary Social Studies [1]	2
ED 414	Teaching Elementary Science & Health [1]	2
ED 417	Teaching Mathematics in Elementary School [1]	2
ED 485	Capstone Seminar in Education [2]	1
ED 487	Student Teaching Elementary [2]	12
Total Credits		**40**

1. Admission to the School of Education required (e.g. cumulative GPA of 2.600, good standing, etc.)
2. Approved application to student teaching required.

For students pursuing a Early Childhood Education degree, the below requirements will be completed in place of the Secondary & K-12 Education minor requirements.

Specific Requirements for Early Childhood Education

CSU Pueblo requires the student interested in Early Childhood Education to complete a major in Early Childhood Education (K-3 education concentration) and all of the courses listed below, which constitute a minor in Education.

Course	Title	Credits
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology	3
ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
ECE 461	Teaching ECE Social Studies [1]	2
ECE 463	Teaching ECE Math [1]	2
ECE 464	Teaching ECE Science [1]	2
RDG 410	Teaching Reading [1]	3
RDG 411	Teaching Writing [1]	2
ECE 485	Capstone in ECE [2]	1
ECE 486	Student Teaching in ECE [2]	12
Total Credits		**34**

[1] Admission to the School of Education required (e.g. cumulative GPA of 2.600, good standing, etc.).

[2] Approved application for student teaching required.

Secondary English, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in Secondary English Education. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Goals

To prepare individuals for Colorado Teacher licensure in Secondary English Education.

Specific Program Requirements

Students pursuing this certificate must meet all requirements of the Teacher Education Program.

Course	Title	Credits
ENG 201	Introduction to Literary Theory	3
ENG 493	Senior Seminar	3
ENG 310	Literary Forms & Genres	3
ENG 210	American Literature I	3
ENG 212	American Literature II	3
ENG 231	Literature of England I	3
or ENG 232	Literature of England II	
ENG XXX (Upper Div. Elective not Amer. Lit.		3
ENG XXX (One course in Literary Theory)		3
ENG 303	Advanced Rhetoric & Writing	3
ENG XXX (Writing Elective)		3
ENG 352	English Syntax and Usage	3
ENG 481	Shakespeare	3
ENG 412	Young Adult Literature	3
RDG 555	Advanced Linguistics for Educators	3
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
PSYC 151	Human Development (GT-SS3)	3
or PSYC 251	Childhood and Adolescence	
ED 202	Foundations of Education	3
ED 520	Educational Media and Technology	3
ED 560	Professional Develop in Curriculum & Instruction	4
ED 512	Teaching Diverse Learners	3
ED 447	Teaching English in Secondary Schools	4
RDG 535	Advanced Disciplinary Literacy	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
Total Credits		**87**

Secondary Mathematics, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in Secondary Mathematics. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Goals

To prepare individuals for Colorado Teacher licensure in Secondary Mathematics.

Specific Program Requirements

Students pursuing this certificate must meet all requirements of the Teacher Education Program.

Course	Title	Credits
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
MATH 307	Introduction to Linear Algebra	4
MATH 330	Introduction to Higher Geometry	3
MATH 319	Number Theory	3
or MATH 427	Abstract Algebra	
MATH 156	Introduction to Statistics (GT-MA1)	3
or MATH 350	Probability	
MATH 463	History of Mathematics	3
Computer Programming Course		4
One of the following Sequences:		10
CHEM 121/L and CHEM 122/L or		
PHYS 221/L and PHYS 222/L		
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
PSYC 151	Human Development (GT-SS3)	3
or PSYC 251	Childhood and Adolescence	
ED 202	Foundations of Education	3

ED 520	Educational Media and Technology	3
ED 560	Professional Develop in Curriculum & Instruction	4
ED 512	Teaching Diverse Learners	3
MATH 577	Concepts in Secondary School Mathematics	4
RDG 535	Advanced Disciplinary Literacy	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
Total Credits		**85**

Secondary Science - Biology, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in Secondary Science. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Goals

To prepare individuals for Colorado Teacher licensure in Secondary Science.

Specific Program Requirements

Students pursuing this certificate must meet all requirements of the Teacher Education Program.

Course	Title	Credits
BIOL 181	College Biology I/Organismal Bio (GT-SC2)	3
BIOL 181L	College Biology I/Organismal Bio Lab (GT-SC1)	1
BIOL 182	College Biology II/Cellular Biology (GT-SC2)	3
BIOL 182L	College Biology II/Cellular Bio Lab (GT-SC1)	1
BIOL 201	Botany (GT-SC2)	2
BIOL 201L	Botany Laboratory (GT-SC1)	2
or		
BIOL 202	Zoology	2
BIOL 202L	Zoology Laboratory	2
BIOL 350	Mendelian and Population Genetics	2
BIOL 351	Molecular Biology & Genetics	3
BIOL 206	Introduction to Microbiology	3
BIOL 206L	Introduction to Microbiology Lab	1
or		
BIOL 301	General Microbiology	3
BIOL 301L	General Microbiology Lab	2
One of the following sets of courses:		4
BIOL 223	Human Physiology and Anatomy I (GT-SC2)	3
BIOL 223L	Human Physiology and Anatomy I Lab (GT-SC1)	1
or		
BIOL 224	Human Physiology and Anatomy II (GT-SC2)	3
BIOL 224L	Human Physiology and Anatomy II Lab (GT-SC1)	1
or		
BIOL 414	Vertebrate Physiology	3
BIOL 414L	Vertebrate Physiology Lab	1
BIOL 352	Evolutionary Biology and Ecology	3
BIOL 378	Laboratory in Teaching Biology	1
Upper Div. Field Elective		3
Upper Div. Elective & Lab		3
CHEM 121	General Chemistry I (GT-SC2)	4
CHEM 121L	General Chemistry Lab I (GT-SC1)	1
CHEM 122	General Chemistry II (GT-SC2)	4
CHEM 122L	General Chemistry Lab II (GT-SC1)	1
CHEM 211	Introduction to Organic Chemistry	3
CHEM 211L	Intro to Organic Chemistry Lab	1
or		
CHEM 301	Organic Chemistry I	3
CHEM 301L	Organic Chemistry Lab I	2
GEOL 101	Earth Science (GT-SC2)	3
GEOL 101L	Earth Science Lab (GT-SC1)	1
MATH 221	Applied Calc: An Intuitive Approach (GT-MA1)	4
PHYS 201	Principles of Physics I (GT-SC2)	3
PHYS 201L	Principles of Physics Lab I (GT-SC1)	1
PHYS 202	Principles Of Physics II (GT-SC2)	3
PHYS 202L	Principles Of Physics II Lab (GT-SC1)	1
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
PSYC 151	Human Development (GT-SS3)	3
or PSYC 251	Childhood and Adolescence	
ED 202	Foundations of Education	3
ED 520	Educational Media and Technology	3
ED 560	Professional Develop in Curriculum & Instruction	4
ED 512	Teaching Diverse Learners	3
ED 544	Teaching Secondary Science	3
RDG 535	Advanced Disciplinary Literacy	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
Total Credits		**109**

Secondary Science - Chemistry, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in Secondary Science. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Goals

To prepare individuals for Colorado Teacher licensure in Secondary Science.

Specific Program Requirements

Students pursuing this certificate must meet all requirements of the Teacher Education Program.

Course	Title	Credits
BIOL 100	Principles of Biology (GT-SC2)	3
BIOL 100L	Principles of Biology Lab (GT-SC1)	1
BIOL 121	Environmental Conservation (GT-SC2)	3
BIOL 121L	Environmental Conservation Lab (GT-SC1)	1
CHEM 121	General Chemistry I (GT-SC2)	4

CHEM 121L	General Chemistry Lab I (GT-SC1)	1
CHEM 122	General Chemistry II (GT-SC2)	4
CHEM 122L	General Chemistry Lab II (GT-SC1)	1
CHEM 211	Introduction to Organic Chemistry	3
or CHEM 301	Organic Chemistry I	
CHEM 211L	Intro to Organic Chemistry Lab	1
or CHEM 301L	Organic Chemistry Lab I	
CHEM 311	Biochemistry Survey	3
CHEM 317	Quantitative Analysis	3
CHEM 317L	Quantitative Analysis Lab	2
CHEM 321	Physical Chemistry I	3
CHEM 419	Instrumental Analysis	3
or CHEM 420	Inorganic Chemistry	
CHEM 419L	Instrumental Analysis Lab	2
or CHEM 420L	Inorganic Chemistry Lab	
GEOL 101	Earth Science (GT-SC2)	3
GEOL 101L	Earth Science Lab (GT-SC1)	1
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
PHYS 221	General Physics I	4
PHYS 221L	General Physics I Lab (GT-SC1)	1
PHYS 222	General Physics II	4
PHYS 222L	General Physics II Lab (GT-SC1)	1
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
PSYC 151	Human Development (GT-SS3)	3
or PSYC 251	Childhood and Adolescence	
ED 202	Foundations of Education	3
ED 520	Educational Media and Technology	3
ED 560	Professional Develop in Curriculum & Instruction	4
ED 512	Teaching Diverse Learners	3
ED 544	Teaching Secondary Science	3
RDG 535	Advanced Disciplinary Literacy	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
Total Credits		**106**

Secondary Science - Physical Science, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in Secondary Science. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Goals

To prepare individuals for Colorado Teacher licensure in Secondary Science.

Specific Program Requirements

Students pursuing this certificate must meet all requirements of the Teacher Education Program.

Course	Title	Credits
BIOL 100	Principles of Biology (GT-SC2)	3
BIOL 100L	Principles of Biology Lab (GT-SC1)	1
BIOL 121	Environmental Conservation (GT-SC2)	3
BIOL 121L	Environmental Conservation Lab (GT-SC1)	1
CHEM 121	General Chemistry I (GT-SC2)	4
CHEM 121L	General Chemistry Lab I (GT-SC1)	1
CHEM 122	General Chemistry II (GT-SC2)	4
CHEM 122L	General Chemistry Lab II (GT-SC1)	1
CHEM 211	Introduction to Organic Chemistry	3
CHEM 211L	Intro to Organic Chemistry Lab	1
or		
CHEM 301	Organic Chemistry I	3
CHEM 301L	Organic Chemistry Lab I	2
CHEM 311	Biochemistry Survey	3
CHEM 317	Quantitative Analysis	3
CHEM 317L	Quantitative Analysis Lab	2
CHEM 321	Physical Chemistry I	3
CHEM 378	Practicum in Laboratory Instruction	1
GEOL 101	Earth Science (GT-SC2)	3
GEOL 101L	Earth Science Lab (GT-SC1)	1
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
PHYS 110	Astronomy (GT-SC2)	3
PHYS 140	Light, Energy, & the Atom (GT-SC2)	3
PHYS 140L	Light, Energy and the Atom Lab (GT-SC1)	1
PHYS 221	General Physics I	4
PHYS 221L	General Physics I Lab (GT-SC1)	1
PHYS 222	General Physics II	4
PHYS 222L	General Physics II Lab (GT-SC1)	1
PHYS 323	General Physics III	4
PHYS 323L	General Physics III Lab	1
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
PSYC 151	Human Development (GT-SS3)	3
or PSYC 251	Childhood and Adolescence	
ED 202	Foundations of Education	3
ED 520	Educational Media and Technology	3
ED 560	Professional Develop in Curriculum & Instruction	4
ED 512	Teaching Diverse Learners	3
ED 544	Teaching Secondary Science	3
RDG 535	Advanced Disciplinary Literacy	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
Total Credits		**114**

Secondary Science - Physics, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in Secondary Science. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Goals

To prepare individuals for Colorado Teacher licensure in Secondary Science.

Specific Program Requirements

Students pursuing this certificate must meet all requirements of the Teacher Education Program.

Course	Title	Credits
BIOL 100	Principles of Biology (GT-SC2)	3
BIOL 100L	Principles of Biology Lab (GT-SC1)	1
BIOL 121	Environmental Conservation (GT-SC2)	3
BIOL 121L	Environmental Conservation Lab (GT-SC1)	1
CHEM 121	General Chemistry I (GT-SC2)	4
CHEM 121L	General Chemistry Lab I (GT-SC1)	1
CHEM 122	General Chemistry II (GT-SC2)	4
CHEM 122L	General Chemistry Lab II (GT-SC1)	1
GEOL 101	Earth Science (GT-SC2)	3
GEOL 101L	Earth Science Lab (GT-SC1)	1
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
PHYS 110	Astronomy (GT-SC2)	3
PHYS 140	Light, Energy, & the Atom (GT-SC2)	3
PHYS 140L	Light, Energy and the Atom Lab (GT-SC1)	1
PHYS 221	General Physics I	4
PHYS 221L	General Physics I Lab (GT-SC1)	1
PHYS 222	General Physics II	4
PHYS 222L	General Physics II Lab (GT-SC1)	1
PHYS 323	General Physics III	4
PHYS 323L	General Physics III Lab	1
PHYS 321	Thermodynamics	3
PHYS 322	Advanced Laboratory - Thermo	1
PHYS 341	Optics	3
PHYS 342	Advanced Laboratory-Optics	1
PHYS 480	Practicum in Laboratory Instruction	1
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
PSYC 151	Human Development (GT-SS3)	3
or PSYC 251	Childhood and Adolescence	
ED 202	Foundations of Education	3
ED 520	Educational Media and Technology	3
ED 560	Professional Develop in Curriculum & Instruction	4
ED 512	Teaching Diverse Learners	3
ED 544	Teaching Secondary Science	3
RDG 535	Advanced Disciplinary Literacy	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
Total Credits		**107**

Secondary Social Studies - History, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in Secondary Social Studies - History. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Goals

To prepare individuals for Colorado Teacher licensure in Secondary Social Studies - History.

Specific Program Requirements

Students pursuing this certificate must meet all requirements of the Teacher Education Program.

Course	Title	Credits
HIST 110	World History to 1500 (GT-HI1)	3
HIST 111	World History since 1500 (GT-HI1)	3
HIST 201	U.S. History I (GT-HI1)	3
HIST 202	U.S. History II (GT-HI1)	3
HIST 493	Seminar	3
History Electives		21
15 hours must be upper div.		
6 hours must be non-U.S. History		
GEOG 101	Physical Geography	3
GEOG 103	World Regional Geography (GT-SS2)	3
POLS 101	American Government (GT-SS1)	3
POLS 102	State & Local Government	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
PSYC 151	Human Development (GT-SS3)	3
or PSYC 251	Childhood and Adolescence	
ED 202	Foundations of Education	3
ED 520	Educational Media and Technology	3
ED 560	Professional Develop in Curriculum & Instruction	4
ED 512	Teaching Diverse Learners	3
ED 551	Teaching Secondary Social Studies	3
RDG 535	Advanced Disciplinary Literacy	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
Total Credits		**95**

Secondary Social Studies - Political Science, Post-Baccalaureate Certificate

This program leads to Colorado Teacher licensure in Secondary Social Studies - Political Science. It is for individuals who have completed a bachelor's degree from a regionally-accredited institution. It can be completed in conjunction with our M.Ed. program.

Goals

To prepare individuals for Colorado Teacher licensure in Secondary Social Studies - Political Science.

Specific Program Requirements

Students pursuing this certificate must meet all requirements of the Teacher Education Program.

Course	Title	Credits
POLS 101	American Government (GT-SS1)	3
POLS 102	State & Local Government	3
POLS 201	International Relations (GT-SS1)	3
POLS 202	Comparative Politics	3
POLS 250	Political Analysis & Methods I	3
POLS 370	Western Political Thought	3
POLS 493	Seminar	1
HIST 110	World History to 1500 (GT-HI1)	3
HIST 111	World History since 1500 (GT-HI1)	3
HIST 201	U.S. History I (GT-HI1)	3
HIST 202	U.S. History II (GT-HI1)	3
GEOG 101	Physical Geography	3
GEOG 103	World Regional Geography (GT-SS2)	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
PSYC 151	Human Development (GT-SS3)	3
or PSYC 251	Childhood and Adolescence	
ED 202	Foundations of Education	3
ED 520	Educational Media and Technology	3
ED 560	Professional Develop in Curriculum & Instruction	4
ED 512	Teaching Diverse Learners	3
ED 551	Teaching Secondary Social Studies	3
RDG 535	Advanced Disciplinary Literacy	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
Total Credits		**84**

School of Health Sciences & Human Movement

School of Health Sciences & Human Movement Vision and Mission

Our vision is to be the peoples' choice for Health Science and Human Movement degree programs through the delivery of innovative instruction to establish diverse professionals. We develop diverse professionals through engaging curriculum.

Our mission provides broad theory-based foundations which incorporate laboratory and field-based learning opportunities resulting in real-world experience, training, inter-professional education, and mentoring. Our diverse students develop skills that promote healthy lifestyles and fitness. Students graduate ready to seek employment or pursue advanced education in fields of health science, human movement, or related professions. Our graduates are ethical and productive contributors to the health and well-being of their communities.

Program Goals

1. Provide coursework that prepares students to effectively work in careers with diverse populations and cultures, and that adequately prepares students for advanced education in a dynamically changing health science and human movement community.
2. Use relevant and best practice pedagogy, activities and assessments which connect students to the workforce/community.
3. Engage in the use of current technologies in preparing students for the health and human movement-related needs of the future.
4. Expose students to contemporary ethics and cultural issues they will encounter in the health science and human movement work force.

The School of Health Sciences & Human Movement Awards Four Degrees and Three 3+2 Programs:

1. A Bachelor of Science degree in Exercise Science, Physical Education, and Recreation (EXPER). The BS in Exercise Science, Physical Education, and Recreation (EXPER) program includes four concentration of study:
    - Exercise Science
    - Physical Education K-12 Teacher Preparation
    - Recreation
    - Strength & Conditioning
2. A Bachelor of Science degree in Health Science (HS). The BS in HS includes five concentration of study:
    - Health Science
    - Health Coaching
    - Public Health
    - Pre-Accelerated Nursing
    - Pre-Athletic Training
    - Pre-Nursing
3. A Bachelor of Applied Science in Health Science and Administration
    - This degree is designed for students who have earned an AAS or AGS in an allied health field and is delivered completely online through CSU Pueblo Extended Studies.
4. A Master of Science in Athletic Training
    - This degree can be complete as a 3+2 through the Pre-Athletic Training concentration or as a 2 year Master degree after earning a Bachelor degree.

5. Three 3+2 Programs are available to complete a bachelor and master degree in five years.
    - 3+2 BS Exercise Science, Physical Education and Recreation (K-12 Physical Education) and MEd in Education with a Health endorsement
    - 3+2 BS Health Sciences and MBA with Healthcare Administration
    - 3+2 BS Health Sciences (Pre-AT) and MS in Athletic Training

Undergraduate General Requirements

All HSHM Majors are required to:

- Complete an EXPER or HS concentration of study with a cumulative GPA of 2.50 or higher.
- Earn a 2.0 overall GPA to enroll in 300 or 400 level courses in the department;
- Earn a minimum grade of a "C" in all prerequisite and major courses;
- Repeat prerequisite and major courses with a grade of "D" or lower until a grade of "C" or higher is achieved; and
- Earn a cumulative GPA of 2.0 or higher in required English and speech communication courses.

EXPER Majors

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

- Graduates of the Exercise Science coursework are prepared for exercise and fitness-related professional positions. This concentration is an excellent selection for students preparing for advanced study in fields such as exercise physiology, coaching, heart rehabilitation, or sport administration.
- Graduates of the Physical Education K-12 Teacher Preparation concentration who also complete the Teacher Education program, and receive a passing score on the Colorado Department of Education PRAXIS 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.
- Graduates of the Recreation concentration are prepared for careers in City and County Recreation Departments, YMCAs, Intramural Sports, Resort & Travel destinations, Outdoor Adventure, Wilderness Experiences, Youth Camps and Developmental Programs.
- Graduates of the Strength and Conditioning concentration are prepared to take the National Strength and Conditioning Association certification. Graduates can find employment in fitness and recreation facilities, high school and college athletics and the health and wellness industries.

EXPER Student Learning Outcomes

General Exercise Science, Physical Education, Strength and Conditioning and Recreation students will:

1. Possess content knowledge and skills necessary for their perspective fields of study;
2. Exhibit the ability to read and interpret scientific research with application of the scientific methods, statistics, study design, and reporting;
3. Evaluate and integrate critical concepts and skills acquired in the EXPER program to common professional problems in the fields of interest;
4. Exhibit effective oral and written communication regarding subjects related to EXPER in an individual and group setting; and
5. Apply and demonstrate knowledge, skills and critical problem solving in a field-based setting.

Assessment of EXPER Student/Program Outcomes

The student outcomes are measured and assessed through several techniques:

- Case study assessment and end of program examination;
- Internship, fieldwork and student teaching portfolios and projects;
- Internship, fieldwork and student teaching site supervisor evaluations;
- Student exit surveys; and
- Potential employer surveys and/or Advisory Committee;
- End of program exams will be, or will be representative of, the professional certification exams in each concentration area. Case study questions will be developed by the faculty and EXPER Advisory Committee (made up of professionals in the EXPER field). The end of program exam will be completed during an appropriate field based course at the end of the course of study but before graduation. The EXHPR curriculum map details the specific types of assessments used in the capstone and experiential end of program courses to assess the Program's Student Outcomes.

EXPER Minors

Five minors are available in Exercise Science, Physical Education, and Recreation:

- The Exercise Science minor is available to all non-EXPER majors. This minor is ideal for other majors interested in Exercise Science or Strength and Conditioning.
- The Coaching minor is available to all students and is a great choice for students aspiring to coach.
- The Outdoor Education minor is for students who want to teach adventure education, outdoor skills and lead trips within the educational settings.
- The Recreation minor is available to all non-REC majors. The minor is ideal for those majoring in EXPER, 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.
- The Tourism Minor is idea for business, communications, or exercise science students who are interested in the expanding field of tourism.

EXPER minors will:

- Complete the credit hour requirement of the minor;
- Complete all required coursework with a cumulative GPA of 2.5 or higher;
- Earn a minimum grade of a "C" in all minor courses;
- Repeat minor courses with a grade of "D" or lower until a grade of "C" or higher is achieved;
- Possess content knowledge and skills necessary for their perspective fields of study;

- Evaluate and integrate critical concepts and skills acquired in the EXPER program to common professional problems in the fields of interest; and
- Exhibit effective oral and written communication regarding subjects related to EXPER in an individual and group setting.

Health Sciences (HS)

The Bachelor of Science in Health Science prepares students for jobs in public health, athletic training and other allied health careers and prepares students for admission to the undergraduate BSN degree, accelerated nursing program, Master in Athletic Training and graduate school at other institutions in a variety of health science-related degrees such as the Master of Science in Athletic Training, Master of Public Health, Master of Healthcare Administration, Master of Counseling, Master of Occupational Therapy, and Doctorate of Physical Therapy. This degree will allow students to earn credentials to move seamlessly into careers with clinics, academic institutions, laboratories, government and community and private agencies and professional sports teams.

HS Majors

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

- Graduates from the Health Science concentration are prepared to work in a wide variety of health science settings and professional positions including home health care coordinator, health maintenance organization care coordinator, case manager, insurance company prevention coordinator, women, infant and children health worker, health navigator, and any number of other related careers.
- Graduates from the Health Coaching concentration are prepared to work in worksite health promotion programs, insurance prevention programs, case manager, behavioral health site, or in private practice as a health coach assisting clients with behavior change and disease prevention.
- Graduates from the Pre-Athletic Training concentration are prepared to enter a Master's degree in Athletic Training and/or work in the fitness or sports industry.
- Students in the Pre-Nursing concentration are prepared to apply for entrance into the basic Bachelor of Science in Nursing Program.
- Students in the Public Health concentration are prepared to work in a variety of public health positions in government and community settings. Public Health promotes and protects the health of people in the communities where they work, live and play through education, research, prevention initiatives, and policy change.
- Students from the Pre-Accelerated Nursing concentration will be prepared to enter the CSU Pueblo accelerated nursing program. The application is due by October 1 for a summer start in the next academic year.

HS Student Learning Outcomes

1. Summarize and synthesize information relevant to assessing and improving population health and healthcare issues;
2. Exhibit the ability to read and interpret scientific research with application of the scientific methods, statistics, study design, and reporting in the health sciences;
3. Evaluate and integrate critical concepts and skills acquired in the health sciences curriculum to common professional problems in the health science fields of interest;
4. Exhibit effective oral and written communication as well as mass communication regarding subjects related to the health sciences in an individual and group setting;
5. Apply and demonstrate knowledge, skills and critical problem-solving in a field-based and/or clinical setting;
6. Successfully enter into a health science-related career or into a graduate or other healthcare program;

Assessment of HS Student/Program Outcomes

The student outcomes are measured and assessed through several techniques:

- Student samples of writing, communication, and project implementation.
- Case study assessment and end of program examination;
- Fieldwork and internship portfolios and projects;
- Fieldwork and internship site supervisor evaluations;
- Student exit surveys; and
- Potential employer surveys

End-of-program exams will be, or will be representative of, the professional certification exams in each concentration area including case study questions developed by the faculty and HS Advisory Committee (made up of professionals in the health sciences field). The end-of-program exams are completed during an appropriate field-based course at the end of the course of study but before graduation. The HS curriculum map details the specific types of assessments used in the capstone and experiential end-of-program courses to assess the Program's Student Outcomes.

HS Minors

Two minors are available in Health Sciences:

- The Public Health minor is available to students who are interested in working in disease prevention and community health. It is ideal for students majoring in EXPER, business, mass communications, psychology, sociology and math.
- The Health Coaching minor is available to students who are interested in expanding their knowledge of coaching individuals through health behavior change and is ideal for students majoring in Psychology, Sociology, Social Work, Communications and EXPER.

HS minors will:

- Complete the credit hour requirement of the minor;
- Complete all required coursework with a cumulative GPA of 2.5 or higher;
- Earn a minimum grade of a "C" in all minor courses;
- Repeat minor courses with a grade of "D" or lower until a grade of "C" or higher is achieved;
- Possess content knowledge and skills necessary for their perspective fields of study;
- Evaluate and integrate critical concepts and skills acquired in the HS program to common professional problems in the fields of interest; and
- Exhibit effective oral and written communication regarding subjects related to HS in an individual and group setting.

Academic Programs

Undergraduate Programs

- Athletic Training 3+2 Program, Bachelor of Science/Master of Science (p. 207)
- Exercise Science, Physical Education, & Recreation: General Exercise Science Concentration, Bachelor of Science (p. 210)
- Exercise Science, Physical Education, & Recreation: K-12 Physical Education Teacher Preparation Concentration, Bachelor of Science (p. 212)
- Exercise Science, Physical Education, & Recreation: K-12 Teacher Preparation Concentration 3+2 Plan, Integrated Bachelor of Science/Master of Education: Health & Physical Education Concentration (p. 214)
- Exercise Science, Physical Education, & Recreation: Recreation Concentration, Bachelor of Science (p. 217)
- Exercise Science, Physical Education, & Recreation: Strength & Conditioning Concentration, Bachelor of Science (p. 218)
- Health Science & Administration, Bachelor of Applied Science (p. 220)
- Health Sciences General Concentration 3+2 Plan, Integrated Bachelor of Science/Master of Business Administration: Healthcare Administration Concentration (p. 534)
- Health Sciences: General Health Science Concentration, Bachelor of Science (p. 221)
- Health Sciences: Health Coaching Concentration, Bachelor of Science (p. 223)
- Health Sciences: Pre-Accelerated Nursing Concentration, Bachelor of Science (p. 224)
- Health Sciences: Pre-Athletic Training Concentration, Bachelor of Science (p. 225)
- Health Sciences: Pre-Nursing Concentration (p. 226)
- Health Sciences: Public Health Concentration, Bachelor of Science (p. 228)

Minors

- Coaching, Minor (p. 210)
- Exercise Science, Minor (p. 210)
- Fitness & Recreational Sports Management, Minor (p. 219)
- Health Coaching, Minor (p. 220)
- Outdoor Recreation, Minor (p. 229)
- Public Health, Minor (p. 230)
- Recreation, Minor (p. 230)
- Tourism, Minor (p. 230)

Certificates

- Health & Fitness Certification for the Department of Corrections (p. 219)
- Recreation Leadership, Certificate (p. 230)

3+2 Programs

- Athletic Training 3+2 Program, Bachelor of Science/Master of Science (p. 207)
- Athletic Training, Master of Science (p. 209)
- Exercise Science, Physical Education, & Recreation: K-12 Teacher Preparation Concentration 3+2 Plan, Integrated Bachelor of Science/Master of Education: Health & Physical Education Concentration (p. 214)
- Health Sciences General Concentration 3+2 Plan, Integrated Bachelor of Science/Master of Business Administration: Healthcare Administration Concentration (p. 534)

Graduate Programs

- Athletic Training, Master of Science (p. 209)

Athletic Training (AT)

AT 230 CPR & Sudden Illness & Injury Recognition 1(0.5-0.5)
As Needed.
This course will provide knowledge and skills for CPR and sudden Illness and injury recognition for the Lay Professional. This course in not appropriate for students majoring in EXPER, Health Science, or Nursing.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AT 232 First Aid 2(1-1)
Fall, Spring, Summer.
Knowledge and skills in current first-aid and CPR procedures for the Lay Responder. First-aid and CPR certification will be earned in this class.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AT 234 Emergency Care 2(1-2)
Fall, Summer.
Study of emergency care of injuries/illnesses, including the assessment of vital signs, splinting and emergency transport. Overview of injuries/illnesses associated with sudden death.
Prerequisite: AT 232 and AT 260.
Corequisite: None.
Registration Information: None.

AT 260 Injury/Illness Care and Prevention 3(2-2)
Fall, Spring.
Study of prevention and care of injuries and illnesses commonly sustained in an active population.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AT 291 Special Topics (1-5 V)
Fall, Spring.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of Instructor. Repeatable (99).

AT 301 Physical Assessment 3(2-2)
Fall, Spring.
Study of physical assessments including bone/soft tissue palpations, vital signs, goniometry, manual muscle testing, neurological testing, postural assessment, functional movement screening and documentation of results.
Prerequisite: BIOL 223 and BIOL 223L and BIOL 224 and BIOL 224L.
Corequisite: None.
Registration Information: None.

AT 323 Functional Exercise Training 2(1-2)
Spring.
Course applications include exercise program design, aspects of functional training, and components of various types of exercise regimens as related to injury prevention and recovery.
Prerequisite: EPER 364.
Corequisite: None.
Registration Information: None.

AT 494 Field Experience (1-5 V)
As Needed.
Learning experience to be conducted in athletic training related clinical environment and supervised by the athletic training education program.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of program director. Repeatable (99).

AT 495 Independent Study (1-5 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of program director. Repeatable (99).

AT 501 Foundations of Athletic Training 3(2-2)
Summer.
Study of foundational knowledge and clinical skills in athletic training.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance into the MS in AT Program.

AT 502 Functional Anatomy of Injury 3(2-2)
Summer.
Study of anatomical aspects of musculoskeletal, vascular and peripheral nervous system injuries. Exploration of anatomical joint design and function, focusing on how injury etiology impacts trunk and extremity integrity.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance into the MS in AT Program.

AT 503 Fundamentals of Public Health 1(1-0)
Summer.
Foundations of public health as it relates to athletic training, includes the history and current structure of public health, essential services, and national and professional organizations of public health society.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance in MS in AT program.

AT 504 Concepts of Therapeutic Interventions 3(2-2)
Summer.
Instruction on the concepts for the use of therapeutic modalities and rehabilitation in the management of injuries, including the application of select therapeutic modalities and rehabilitation skills.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance into MS in AT Program.

AT 510 Clinical Integration I 2(2-0)
Fall.
The clinical integration of knowledge and skills of athletic training in various clinical settings, under the direction of an assigned clinical preceptor.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance into the MSAT Program required.

AT 511 Assessment & Management I 4(2-4)
Fall.
Study of pathomechanics, assessment and early therapeutic intervention of the lower extremity. Evidence-based assessment and Phase I & II intervention techniques for sound clinical decision making based on patient's needs.
Prerequisite: AT 501 and AT 504.
Corequisite: None.
Registration Information: Acceptance into MS in AT Program.

AT 513 Professionalism and Ethics 1(1-0)
Fall.
Study of the professional and ethical behaviors of the certified athletic trainer.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AT 514 Research Methods 2(2-0)
Summer.
Study of the research process and evidence based practice in athletic training. Course will consist of evaluation of available research evidence quality and interpret statistical data and relevance.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance into MS in Athletic Training Program.

AT 520 Clinical Integration II 3(3-0)
Spring.
The clinical integration of knowledge and skills of athletic training in the clinical environment, under the direction of a clinical preceptor.
Prerequisite: AT 510.
Corequisite: None.
Registration Information: None.

AT 521 Assessment and Management II 4(2-4)
Spring.
Study of pathomechanics, assessment, and therapeutic intervention of the upper extremity. Use of evidence based assessment and intervention techniques for sound clinical decision making based on patient's needs.
Prerequisite: AT 511.
Corequisite: None.
Registration Information: None.

AT 522 General Medical Conditions 5(4-2)
Fall.
Study of general medical conditions and recognition and appropriate intervention of disorders affecting socio-cultural, mental, emotional and physical behaviors of those under the care of the athletic trainer.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance into the MS in Athletic Training Program.

AT 530 Clinical Integration III 2(2-0)
Summer.
A general medical specific clinical integration. Students will be responsible for obtaining a family practice or internal medicine physician to serve as their clinical preceptor.
Prerequisite: AT 520.
Corequisite: None.
Registration Information: Approval of program director.

AT 531 Assessment & Management III 3(2-2)
Fall.
Study of pathomechanics, assessment, and therapeutic intervention of the head, neck and spine. Use of evidence based assessment and intervention techniques for sound clinical decision making based on patient's needs.
Prerequisite: AT 521.
Corequisite: None.
Registration Information: Acceptance to MS in AT Program.

AT 533 Fundamentals of Epidemiology 1(1-0)
Fall.
Understanding of health risk and injury. Topics include history of epidemiology and population health, epidemiological study design and population health data tracking in the US as it relates to athletic training.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance in MS in AT program.

AT 534 Rehabilitation in Athletic Training 4(3-2)
Spring.
Learning of skills and techniques to design and implement rehabilitation for musculoskeletal injuries. Understand and demonstrate the progression of clients to safe return to desired level of physical activity.
Prerequisites: AT 511.
Corequisites: None.
Registration Information: Acceptance into the MS in Athletic Training Program.

AT 535 Pharmacology in Athletic Training 1(1-0)
Spring.
Study of pharmacological use in athletic training, including pharmacodynamics, pharmacokinetics, indications, contraindications, dosing, interactions, and adverse reactions.
Prerequisites: AT 522.
Corequisites: None.
Registration Information: Acceptance in the MS in Athletic Training Program.

AT 540 Clinical Integration IV 4(4-0)
Fall.
The clinical integration of knowledge and skills of athletic training in the clinical environment, under the direction of a clinical preceptor.
Prerequisite: AT 530.
Corequisite: None.
Registration Information: None.

AT 542 Administration in Athletic Training 3(3-0)
Fall.
Study of planning, coordinating and supervising administrative components of athletic training, including those pertaining to health care, financial, personnel, facilities management and public relations.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AT 545 Evidence-Based Practice & Research 3(3-0)
Fall.
Develops clinical reasoning skills and application of evidence-based resources to problem-solve as clinicians in an interdisciplinary health care team.
Prerequisite: AT 514.
Corequisite: None.
Registration Information: None.

AT 550 Clinical Integration V 5(5-0)
Spring.
The clinical integration of knowledge and skills of athletic training in the clinical sitting under the direction of a as clinical preceptor. This is a full immersion clinical experience.
Prerequisite: AT 540.
Corequisite: None.
Registration Information: None.

AT 551 BOC Test Prep 1(1-0)
Spring.
This course involves assessment of the student's current status of preparation for the BOC exam. Guidance for reviewing the knowledge and skills content of NATA educational competencies and study plan development.
Prerequisite: None.
Corequisite: None.
Registration Information: Enrollment in last semester of MSAT Program required.

AT 592 Research (1-5 V)
Spring.
Group research project in athletic training conducted in collaboration with an athletic training faculty member. Literature review, proposal, data collection, data analysis, and poster presentation.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of Athletic Training faculty.
Repeatable (3).

Exercise Science, Physical Education, & Recreation (EPER)

EPER 101 Intro to EXPER 2(2-0)
Fall, Spring.
Introduction to fundamentals of exercise science, physical education, and recreation professions. Overview of fitness, conditioning, athletic training, recreation and school-based programs, and career opportunities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 102 Mountain Orientation 2(1-2)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 103 Winter Orientation 2(1-2)
As Needed.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 104 Desert Orientation 2(1-2)
As Needed.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 105 Canyon Orientation 2(1-2)
As Needed.
Students will develop proficiency in canyon travel, group camping, and will explore the geology, geography, and ecology of the canyon country.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 106L Martial Arts and Self-Defense 1(0-2)
As Needed.
Overview of the history, philosophy and techniques of martial arts and self-defense. Includes skill development of physical techniques.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 107L Triathlon 1(0-2)
As Needed.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 108L Yoga 1(0-2)
As Needed.
This course will focus on key concepts in basic yoga resulting in development of valuable life skills related to creating healthy lifestyles.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 109L Volleyball 1(0-2)
As Needed.
An introduction to the fundamental skills, rules and strategies used in power volleyball.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 110L Weight Training 1(0-2)
As Needed.
An introduction to basic strength evaluation, fundamental machine and free weight techniques and safety concepts in the weight room.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 111 Commitment to Academic Excellence 1(1-0)
Fall, Spring.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 112L Rock Climbing 1(0-2)
Spring.
An introduction to the basic understanding of rock climbing, equipment, Leave No Trace environmental ethics and rock climbing as an outdoor recreational activity.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 113L Whitewater Boating 1(0-2)
As Needed.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 114L Basic Mountaineering Techniques 1(0-2)
Fall.
Students will learn necessary information and techniques including clothing, equipment, physical conditioning, stewardship, access, knot tying, and will participate in an incline climb.
Prerequisites: None.
Corequisites: None.
Registration Information: Basic outdoor skills highly recommended.

EPER 116L Camping 1(0-2)
As Needed.
A basic camping class designed to teach the fundamentals of self-sufficient tent camping. Emphasizes clothing, equipment selection, nutrition, and Leave No Trace guidelines.
Prerequisites: None.
Corequisites: None.
Registration Information: Basic outdoor skills highly recommended.

EPER 117L Backpacking 1(0-2)
Fall.
Introduction course on the basics of traveling in the back country with everything one needs in their backpack. Clothing, equipment, orienteering, first aid, route and campsite selection are emphasized during required trips.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 118L Fly Fishing 1(0-2)
As Needed.
An introduction to the basic concepts of fly-fishing. This course includes classroom sessions and field experiences that promote the development and application of practical skills.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 119L Walking for Fitness 1(0-2)
As Needed.
The introduction and development of skills, safety, understanding of body functions and basic conditioning related to aerobic fitness through walking.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 120L Introduction to Search and Rescue 1(0-2)
As Needed.
This course is an introduction to Search and Rescue. Topics include; Incident command systems, search philosophy, strategy, tactics, lost person behavior, equipment, travel and navigation.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 121L Aerobics Instructor Training 1(0-2)
As Needed.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 122L Military Physical Training 1(0-2)
Fall, Spring.
Introduction to physical fitness and training. Students participate in practical training and learn the basics of fitness, nutrition and flexibility.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 123L Zumba 1(0-2)
Fall, Spring.
Zumba is a non-competitive fitness dance program which teaches students to perform steps such as the salsa, meringue, cha-cha, samba, tango, reggaeton, and calypso.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 124L Tai Chi 1(0-2)
As Needed.
Complete form of Tai Chi postures based on Yang/Sun Style will be practiced. Mandarin terminology, health philosophy and Taijiquan will be defined and discussed.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 125L Snow Sports 1(0-2)
Spring.
Beginning fundamental snowboarding and skiing. Students choose level 1-3 skiing and/or boarding lesson at Colorado ski resort. Emphasis on safety, equipment, clothing and trip planning.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 126L Personal Fitness 1(0-2)
As Needed.
Students will learn how to evaluate their personal fitness level and develop a comprehensive exercise program beneficial to their overall health and wellness.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 127L Jogging 1(0-2)
As Needed.
An introduction to walking/jogging/running techniques, training programs, fitness assessment, appropriate footwear and safety considerations.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 128L Aerobics 1(0-2)
As Needed.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 143L Folk, Square, and Ballroom Dance 1(0-2)
As Needed.
Overview of the music and dance techniques used in Folk, Square and Ballroom dancing.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 146L Beginning Swimming 1(0-2)
As Needed.
Introduces the knowledge and skill necessary to handle the body with ease in the water and covers basic mechanical, physiological, and psychological concepts.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 162 Personal Health 3(3-0)
Fall, Spring, Summer.
The development of knowledge and the scientific basis for the analysis, evaluation and promotion of personal health and wellness.
Prerequisites: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: ST)

EPER 162L Personal Health Lab 1(0-2)
Fall, Spring, Summer.
Optional experiential lab studies to augment EPER 162.
Prerequisites: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: ST)

EPER 174L Tennis 1(0-2)
As Needed.
An introduction to the fundamental skills, rules and strategies used in the game of tennis.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 175L Racquetball 1(0-2)
As Needed.
An introduction to the fundamental skills, rules and strategies used in the game of racquetball.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 176L Life Guard Training 2(1-2)
As Needed.
American Red Cross lifeguard certification course that prepares successful candidates to be certified in Lifeguarding, First Aid, and CPR. A swimming pre-test must be passed the first day of class.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 187L Intercollegiate Sports I 2(0-4)
Fall, Spring.
Participation in an intercollegiate sports program. Course registration is limited to freshman competing in a varsity sport program offered by CSU Pueblo.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 201 Drugs and Healthy Lifestyles 3(3-0)
Fall, Spring.
An overview of the impact of drug abuse in today's society along with prevention information and treatment programs available.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 205L Snow Sports II 1(0-2)
Spring.
For students with experience in snow sports including skiing and/or snowboarding. Emphasis on safety and techniques of telemark skiing, cross country skiing, and snowshoeing.
Prerequisites: None.
Corequisites: None.
Registration Information: Ski or snowboard experience strongly suggested.

EPER 208L Yoga II 1(0-2)
Fall, Spring.
For students with prior experience in yoga. Emphasis on creating balance in both strength and flexibility through the performance of a variety of postures.
Prerequisite: None.
Corequisite: None.
Registration Information: Previous yoga experience strongly recommended.

EPER 211 Commitment to Service 1(1-0)
Fall, Spring.
Life skills for Sophomore Student-Athletes to enhance their experience by engaging the student in service to his or her campus and surrounding communities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 212 Sports Nutrition 3(3-0)
Fall.
Introduces topics aligned with (NSCA) nutrition standards. Students will learn basic nutritional science, the health risks/benefits associated with common diets/choices, and the use of diet to maximize performance.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 222 Behavior Facilitation 3(3-0)
Fall, Spring.
Study the influence of social and behavioral systems on health. Emphasis on the fundamentals of self-directed behavior change, health dysfunctions, and stress management.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 233 History & Principles of Physical Education & Rec 2(2-0)
Fall.
Study of the history, philosophy and perspectives of physical education and recreation, and their influence upon contemporary American society.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 240 Recreation Program Design 3(3-0)
Fall.
Rationale supporting and methods of conducting recreation programs in a wide variety of public, private, voluntary and commercial recreation agencies.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 243 Methods of Rhythmic Activities 2(2-0)
Spring.
Fundamentals of folk, square and social dance; emphasis on the teaching techniques involved in basic dance styles and rhythms.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 245 Motor Learning and Development 3(3-0)
Spring.
Applied analysis of motor learning and motor development principles and theories throughout the human life span.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 246L Methods of Swimming 1(0.5-1.5)
Fall.
Instruction in methods of teaching techniques, stroke analysis, class organization, pool safety, and pool maintenance. Practice teaching assignments with practical and written final exams.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 249 Challenge Course Leadership 2(2-0)
Fall, Spring.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 250 Commercial Recreation and Tourism 3(3-0)
Fall.
Designing for-profit recreation programs and facilities that are linked to tourism. Practical approach to programming in a commercial setting.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 270 Outdoor Leadership I 2(1-2)
Fall.
An introduction to the concepts of outdoor leadership including a field experience focused on the application of theoretical and practical concepts.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 276L Water Safety Instructor Certification 2(1-2)
As Needed.
Water safety instruction certification may be earned in this course.
Prerequisite: EPER 176L.
Corequisite: None.
Registration Information: Permission of instructor.

EPER 280 Foundations of Therapeutic Recreation 3(3-0)
Fall.
Prescribed recreational activities as clinical treatment modality for impaired clients. Services for developmentally delayed, law offenders, psychologically impaired, sensory impaired, physically disabled, disadvantaged or aging.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 287L Intercollegiate Sports II 2(0-4)
Fall, Spring.
Participation in an intercollegiate sports program. Course registration is limited to sophomore student-athletes competing in a varsity sport program offered at CSU Pueblo.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 291 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

EPER 301 Fitness Technology & Applications 1(1-0)
Fall, Spring.
Students will analyze and apply technology utilized in the fitness and exercise science industry through experiential learning strategies. Performance analysis, HRV, body comp, and other current trends will be explored.
Prerequisite: BIOL 223 and BIOL 223L.
Corequisite: None.
Registration Information: None.

EPER 310L Adv Methods Strength & Conditioning 2(1-2)
Spring.
Integration of the science and application of strength and conditioning methods. Emphasis on learning to perform and teach advanced strength, power, and functional movement techniques.
Prerequisite: None.
Corequisite: None.
Registration Information: Students must have general weight training skills that are approved by the instructor or take EPER 110L.

EPER 320 NSCA Test Preparation 3(3-0)
Spring.
This course is designed to prepare students to take the National Strength and Conditioning Association Certified Personal Trainer or Strength and Conditioning Specialist certification exams.
Prerequisite: BIOL 223 and 223L and EPER 344 and 344L.
Corequisite: None.
Registration Information: None.

EPER 322 Wilderness First Aid 2(2-0)
Fall.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 343 Research and Statistics 3(3-0)
Fall, Spring, Summer.
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 101 or MATH 120 or MATH 156.
Corequisite: None.
Registration Information: None.

EPER 344 Exercise Physiology 3(3-0)
Fall, Spring.
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 and BIOL 223L; EPER 343; MATH 101 or MATH 120 or MATH 156.
Corequisite: None.
Registration Information: None.

EPER 344L Exercise Physiology Lab 1(0-2)
Fall, Spring.
Extension of course lecture which provides practical experience in laboratory experiments which address exercise and exercise theory.
Prerequisite: BIOL 223 and BIOL 223L and EPER 343 and MATH 101 or MATH 120 or MATH 156.
Corequisite: None.
Registration Information: None.

EPER 345 Methods of Physical Activities & Games I 2(2-0)
Fall.
Teaching procedures, skills and techniques of physical activities and games (e.g. adventure education, soccer, basketball, team handball and lacrosse).
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 346 Methods Physical Activities & Games II 2(2-0)
Spring.
Teaching procedures, skills and techniques of physical activities and games (e.g. volleyball, football, hockey, track/field and softball).
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 347 Methods of Fitness Instruction 1(1-0)
Fall.
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: None.
Corequisite: None.
Registration Information: Junior or senior status recommended.

EPER 348 Methods of Individual and Dual Sports 3(3-0)
Fall.
Basic skills and techniques of tennis, racquetball, badminton and golf; emphasis on teaching procedures in these activities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 349 Methods of Outdoor PE & Sustainability 2(2-0)
Fall.
Prepares teachers with skills/knowledge to teach outdoor physical education and sustainability in schools including technical leader skills and sustainability education activities using playgrounds, trails, and natural areas.
Prerequisite: EPER 233.
Corequisite: None.
Registration Information: None.

EPER 350 Leadership & Ethics 3(3-0)
Spring.
Addresses leadership techniques and styles, leadership theory, group dynamics, and ethical considerations in recreation.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Permission of instructor.

EPER 351 Methods of Teaching Elem Physical ED 3(3-0)
Fall.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: Acceptance into Teacher Education Program.

EPER 360 Outdoor Education 3(3-0)
Fall.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 362 Methods of Health Education 3(3-0)
Spring.
Evaluation of current health topics such as human sexuality, violence, environmental and psychoneuroimmunology and their impact on the health of the individual and community.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 364 Kinesiology 3(3-0)
Fall, Spring.
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.
Prerequisites: BIOL 223 and BIOL 223L.
Corequisites: None.
Registration Information: None.

EPER 370 Outdoor Leadership II 2(1-2)
Spring.
A practical application of the concepts and theory introduced in REC 270. Students will be required to plan and lead REC 104.
Prerequisite: EPER 270.
Corequisite: None.
Registration Information: None.

EPER 375 Research & Evaluation of Recreation 3(3-0)
Fall.
Provides an overview of research designs and methodologies using recreation participation data, for needs assessment and program evaluation.
Prerequisite: None.
Corequisite: None.
Registration Information: Completion of general education math course highly recommended.

EPER 381 Environmental Interpretation 3(3-0)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 389 Recreation Practicum 3(0-3)
Fall, Spring, Summer.
Involves selected practical experiential opportunities in Recreation Leadership. Minimum of 150 hours of practical experience in a selected recreation agency.
Prerequisite: REC 280 and REC 360.
Corequisite: None.
Registration Information: None.

EPER 400 Workshop (1-5 V)
As Needed.
Learning experience in physical education offered in large blocks of time not corresponding to the weekly meeting times of the regular course offerings.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of program chair. Repeatable (99).

EPER 432 Applied Sport & Exercise Psychology 3(3-0)
Spring.
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: None.
Corequisite: None.
Registration Information: PSYC 205 strongly recommended.

EPER 436 Exercise Assessment & Prescription 3(3-0)
Fall, Spring.
Methods used to assess exercise clients and prescribe effective exercise programs in order to achieve optimal health. Referral for at risk clients will be discussed.
Prerequisite: EPER 344 and EPER 344L.
Corequisite: None.
Registration Information: None.

EPER 440 Biomechanics 3(3-0)
As Needed.
Course reviews application of basic physics and anatomy for analysis of complex human movement focusing on improving movement efficiency and reducing the potential for injury.
Prerequisite: BIOL 223 and BIOL 223L; EPER 364; MATH 101 or MATH 120 or MATH 156.
Corequisite: None.
Registration Information: None.

EPER 461 Managing Events & Programs 3(3-0)
Spring.
Organizational and administrative functions used in a modern management approach to programs in Physical Education, Health Promotion, Athletics, Fitness, and Recreation.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing.

EPER 464 Adapted Physical Education 3(3-0)
Spring, Odd.
Programs for diverse populations in physical education; emphasis on environments, diseases and injuries which cause individuals to require special attention.
Prerequisite: None.
Corequisite: None.
Registration Information: BIOL 223 and BIOL 223L strongly recommended.

EPER 465 Adapted Physical Education 3(3-0)
Spring, Odd.
Programs for diverse populations in physical education; emphasis on environments, diseases and injuries which cause individuals to require special attention.
Prerequisite: None.
Corequisite: None.
Registration Information: BIOL 223 and BIOL 223L strongly recommended.

EPER 469 Coaching/Officiating Track & Field 2(2-0)
As Needed.
Techniques and strategies of coaching and officiating track and field.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 470 Methods of Coaching 3(3-0)
Fall.
Study of the science and art of coaching. Understanding of the physical, mental, and emotional demands of coaching. Required course for coaching certification in Colorado.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 471 Coaching & Officiating Football 2(2-0)
As Needed.
Techniques and strategy of coaching and officiating football.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 472 Coaching and Officiating Basketball 2(2-0)
As Needed.
Techniques and strategy of coaching and officiating basketball.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 475 Coaching and Officiating Volleyball 2(2-0)
As Needed.
Techniques and strategy of coaching and officiating volleyball.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 478 Methods of Secondary Physical Education 3(2-2)
Fall.
Study of effective teaching with emphasis on teaching methods, student learning time, classroom management and program planning.
Prerequisite: None.
Corequisite: None.
Registration Information: 30 hours field experience and admission to Teacher Education Program.

EPER 480 Business of Tourism 3(3-0)
Spring.
An in-depth examination of tourism theory and methods with a regional scope. This course utilizes a business lens to apply skills in a specialized tourism context. Special attention is focused on challenges within tourism.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 481 Sustainable Practices 3(3-0)
As Needed.
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 and BIOL 121L.
Corequisite: None.
Registration Information: None.

EPER 482 Coaching and Officiating Wrestling 2(2-0)
As Needed.
Techniques and strategy of coaching and officiating wrestling.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 483 Coaching and Officiating Baseball 2(2-0)
As Needed.
Techniques and strategy of coaching and officiating baseball.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 484 Outdoor Resources & Management 3(3-0)
Spring.
Examination of the outdoor recreation experience, the organization of resource-based recreation management and key outdoor recreation policy issues.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Permission of instructor.

EPER 485 Recreation Facility Design/Management 3(3-0)
As Needed.
Presentation of basic elements of design and management of recreational facilities, taking into account the interaction between natural resources and man-made structures.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 486 Coaching And Officiating Soccer (2 V)
As Needed.
Techniques and strategies of coaching and officiating soccer.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 491 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of Instructor. Repeatable (99).

EPER 492 Research (1-6 V)
Fall, Spring, Summer.
Research project conducted in collaboration with a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of a faculty member. Repeatable (6).

EPER 493 Seminar 2(2-0)
As Needed.
Examination of important issues, problems and trends in the professional arena, type of internships, advanced education and jobs available, mock interviews, portfolio development, job preparation, and shadowing in the field.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior Status. EPER 493 strongly recommended before EPER 498.

EPER 494 Field Experience (1-12 V)
Fall, Spring, Summer.
Supervised experiential learning conducted in the professional environment. Experiences/projects must represent the exercise science, recreation or coaching fields. Site supervisor will have at least 5 years of experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of the field experience coordinator and agreement paperwork is required. Repeatable (12).

EPER 495 Independent Study (1-5 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of Department Chair. Repeatable (99).

EPER 498 Internship (1-12 V)
Fall, Spring, Summer.
Supervised experience with approved mentors in select health science settings. Activities include the completion of a major project and other assignments. Minimum of 6 credit hours required for HS majors.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Completion of all other degree requirements. 2.50 GPA in the major. Internship coordinator approval. Completion of Internship Agreement Form. Completion of EPER 493 highly recommended before enrolling in this course. Repeatable (12).

EPER 500 Workshop (1-5 V)
As Needed.
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: None.
Corequisite: None.
Registration Information: Approval of program chair.

EPER 501 Advanced Fitness Tech & Applications 1(1-0)
As Needed.
Advanced analysis of technology utilized in the fitness and exercise science industry through experiential learning strategies. Performance analysis, HRV, body comp, and other current trends will be applied in field setting.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 522 Methods of Elementary Physical Education 3(3-0)
As Needed.
Advanced study of effective teaching for elementary children including; maximizing student learning, student and self-assessment, utilization of resources, planning, implementation and revision.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 529 CurriculumIn Physical Education 2(2-0)
Summer.
The advanced study of physical education curriculum models, planning, and evaluation.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 532 Applied Sport & Exercise Psychology 3(3-0)
As Needed.
This course will explore advanced application of psychological theories and techniques for the enhancement of both sport and exercise.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 536 Community Health 3(2-2)
Fall.
Advanced study of the aspects of community and public health, functions of health services, and application of community health theory.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

EPER 549 Facilitation of Adventure Education 3(3-0)
Summer.
Planning and implementing adventure activities that provide challenge, choice, and opportunities for personal and group growth. Emphasis on program development, facilitation techniques.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 550 Leadership and Ethics 3(3-0)
Spring.
Advanced study of leadership techniques and styles, leadership theory, group dynamics, and ethical considerations in recreation.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 560 Outdoor Education 3(3-0)
Fall.
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: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 562 Contemporary Issues In Hpe 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 565 Adapted Physical Education 3(3-0)
Spring, Odd.
Advanced study of programs for diverse populations in physical education; emphasis on environments, diseases and injuries which cause individuals to require special attention.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 569 Outdoor Leadership I 2(1-2)
Fall.
Concepts of outdoor leadership including field experience focused on the application of theoretical and practical ideas and research.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 570 Methods of Coaching 3(3-0)
Fall.
Advanced study of the science of coaching. Understanding of the physical, mental, and emotional demands of coaching. Required course for coaching certification in Colorado.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

EPER 571 Outdoor Leadership II 2(1-2)
Spring.
Advanced practicum in outdoor leadership. Includes responsibilities in trip planning, management, evaluation, group facilitation and processing, and natural resource agency relations.
Prerequisite: EPER 569.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 578 Methods of Secondary School PE 3(3-0)
Fall.
Advanced study of effective teaching in secondary schools with emphasis on teaching methods, student learning, classroom management and program planning.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 584 Outdoor Resources and Management 3(3-0)
Spring.
Advanced study of the outdoor recreation experience, the organization of resource-based recreation management and key outdoor recreation policy issues.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 585 Methods in Health Promotion 3(2-2)
Fall.
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: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 591 Special Topics (1-5 V)
As Needed.
Graduate level study or activity designed to increase understanding in areas not covered by regular offerings of the department.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of program chair.

EPER 592 Research (1-6 V)
Fall, Spring, Summer.
Graduate level research project conducted in collaboration with a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of a faculty member. Repeatable (6).

EPER 594 Field Experience 1-12(0-1-12)
Fall, Spring, Summer.
Graduate level field experience project completed in coordination with a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Faculty permission and fieldwork agreement are required. Repeatable (6).

EPER 595 Independent Study (1-6 V)
Fall, Spring, Summer.
Graduate level independent study completed in coordination with a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Faculty permission. Repeatable (99).

Health Science (HS)

HS 101 Introduction to Health Professions 2(2-0)
Fall, Spring, Summer.
Introduction to health professions, education requirements, required certifications, accreditation and employment opportunities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 230 Foundations of Public Health 3(3-0)
Fall, Spring.
Overview of key public health concepts, history, and how the core areas of public health help to promote population health. Employs active learning through individual activities, discussions, and field experiences.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 291 Special Topics (1-4 V)
As Needed.
Special Topics in Health Sciences.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 312 Nutrition & Food Systems in Public Health 3(3-0)
As Needed.
Students will learn about food systems at the local, regional, and global levels. Students will examine and discuss critical topics involving health, culture, food production, processing, distribution, and consumption.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 320 Evaluation of Public Health Issues 3(3-0)
Fall.
Critical examination of the social determinants of health, current issues in the US health system, and legal, administrative, and ethical considerations in public health and their impact on individuals and communities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 322 Health Coaching Concepts (3 V)
Fall.
This course will address the core concepts of client centered health coaching including preventive health issues, basics of effective health coaching, motivational interviewing, ethical and legal guidelines, and compliance.
Prerequisite: EPER 222.
Corequisite: None.
Registration Information: None.

HS 325 Health Communication (3 V)
As Needed.
Examination of the effects of the media, mass, social, and participator, in promoting and impeding the achievement of public health goals. Students will develop the skills to design, implement and evaluate health campaigns.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 330 Epidemiology & Disease Prevention 3(3-0)
Fall, Spring.
Overview of principles of epidemiology and lifestyle-disease pathophysiology. Examines the use and broad application of epidemiologic concepts in public health to identify risk factors and resolve health issues in society.
Prerequisite: MATH 101 or MATH 120 or MATH 156.
Corequisite: None.
Registration Information: HS 230 strongly recommended.

HS 335 Public Health and the Environment 3(3-0)
Spring.
This course introduces major issues of environmental health science, examines what those issues are, what determines them, how they impact population health, and ways in which they can be altered to improve health.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 336 Community and Global Health 3(3-0)
Spring.
An examination of the political, religious, social and economic influences on the continuum of local/globe health and the role citizenship plays in advocating for the equitable distribution of health resources.
Prerequisite: None.
Corequisite: None.
Registration Information: HS 230 strongly recommended.

HS 402 Grant Writing & Community Partnerships 3(3-0)
As Needed.
The course focuses on the grant writing process for public health and the health sciences, and identifying and developing individual and agency partners for community-based health and wellness initiatives.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 422 Applied Health Coaching 3(3-0)
Spring.
This course will address advanced concepts in Health Coaching and explore challenging issues regarding health coaching topics, legal and ethical issues, and provide opportunities for experiential application activities.
Prerequisite: HS 322.
Corequisite: None.
Registration Information: None.

HS 430 Public Health Program Planning 3(3-0)
Fall.
Assessment and planning methods for public health. Activities include gathering health related data, conducting needs assessments and reviewing or developing evidenced based, city, county and state level program plans.
Prerequisite: HS 230.
Corequisite: None.
Registration Information: None.

HS 435 Public Health Program Evaluation 3(3-0)
Spring.
Practical applications for the development of skills in public health program implementation and evaluation methods within a variety of settings including community, school/workplace and online.
Prerequisite: HS 230.
Corequisite: None.
Registration Information: None.

HS 491 Special Topics (1-6 V)
As Needed.
Special topics in Health Science.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 492 Research (1-6 V)
Fall, Spring, Summer.
Research project conducted in collaboration with a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of faculty member. Repeatable (6).

HS 493 Seminar 2(2-0)
Fall, Spring, Summer.
Examination of important issues and trends in the professional arena, type of internships, advanced education and jobs available, mock interviews, portfolio development, job preparation, and shadowing in the field.
Prerequisites: None.
Corequisites: None.
Registration Information: Senior status required. Highly recommend this course before HS 498.

HS 494 Field Experience (1-12 V)
Fall, Spring, Summer.
Supervised experiential learning activities to be conducted in the actual professional environment. Project and work experiences must represent the Health Sciences field. Student arranges the site. Requires field agreement.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of field experience coordinator. Completion of field experience agreement. Repeatable (12).

HS 495 Independent Study (1-6 V)
As Needed.
Independent Study in the Health Sciences.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 498 Internship (1-12 V)
Fall, Spring, Summer.
Supervised experience with approved mentors in select health science settings. Activities include the completion of a major project, and other assignments. Minimum of 6 credit hours required for HS majors.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Completion of degree requirements. 2.5 GPA in the major. Internship Coordinator approval. Completion of Internship Agreement Form. Completion of HS 493 highly recommended before enrolling in this course. Repeatable (12).

HS 520 Advanced Evaluation of Health Issues 3(3-0)
As Needed.
Critically examines current health issues and their impact on individuals and communities including the ability to explain various viewpoints, make recommendations, and evaluate the fit of various solutions.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

HS 536 Community & Global Health Application 3(3-0)
As Needed.
The purpose of this course is the analysis and application of all aspects of community and global health, functions of health services at all levels, and the exploration of current and local health problems.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 594 Field Experience 1-12(0-45)
As Needed.
Supervised experiential learning activities to be conducted in the professional environment. Project and work experience must represent the Health Sciences field. Graduate level project and/or research required.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (12).

Recreation (REC)

Undergraduate Courses

REC 291 Special Topics (1-5 V)
As Needed.
Undergraduate level of study designed to increase understanding in areas not covered by the department.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

REC 388 Outdoor Leadership Practicum (1-3 V)
Fall, Spring, Summer.
Involves selected practical experiential opportunities in outdoor leadership. Minimum of 50 contact hours per credit hour.
Prerequisite: REC 270 and REC 370.
Corequisite: None.
Registration Information: None.

Athletic Training 3+2 Program, Bachelor of Science/Master of Science

Athletic trainers (ATs) are highly qualified, multi-skilled health care professionals who render service or treatment, under the direction of or in collaboration with a physician, in accordance with their education, training and the state's statutes, rules and regulations. As a part of the health care team, services provided by athletic trainers include primary care, injury and illness prevention, wellness promotion and education, emergent care, examination and clinical diagnosis, therapeutic intervention and rehabilitation of injuries and medical conditions. In order to seek certification a Master's degree must be completed.

Students who complete the 3+2 MS degree in Athletic Training will received a BS in Health Science and an MS in Athletic Training at the completion of the 3+2 curriculum. If the student does not complete the entire 3+2 curriculum they could receive the BS in Health Science with the Pre-Athletic Training concentration.

Accreditation

The Masters in Athletic Training Program At Colorado State University Pueblo located in Pueblo, Colorado is accredited by the:

Commission on Accreditation of Athletic Training Education (CAATE)

2001 K Street NW, 3rd Floor

Washington, DC 20006

844 462-2283

Website: https://caate.net/program-info/697/

Initial Accreditation awarded: 03-02-2022

Students are strongly encouraged to work with the athletic training program, Board of Certification (BOC) and the applicable athletic training licensure board in the state they intend to pursue licensing to ensure all BOC certification and state licensure requirements will be satisfactorily met.

Athletic Training 3+2 Plan (BS/MS)

The MS in Athletic Training program 3+2 plan 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.

Student who are interested in becoming a Certified and Licensed Athletic Trainer will begin their degree in the BS in Health Science Pre-Athletic Training concentration. In the Junior Year Pre-AT students can apply to the 3+2 Athletic Training Program which will result in a BS degree in Health Science and an MS degree in Athletic Training after completing 3 years (90 credit hours) of undergraduate work and 2 years (60 credit hours) of graduate work. Students must meet the requirements of both degrees (BS in Health Science Pre-AT and MS in Athletic Training). Students who decide not to apply to the 3+2 program can graduate with a BS in Health Science with 120 credits of undergraduate course work and will be eligible to apply to the 2 year MS in Athletic Training after finishing a bachelor's degree.

Students in the Pre-Athletic Training 3+2 Program should apply in the spring of the junior year of the Health Science Pre-Athletic Training major. Deadline for first consideration is January 15 and final deadline is April 15. Cohort begin in mid-May and the program is year round for two years. Please contact the program director, Dr. Mary Placzkowski at mary.placzkowski@csupueblo.edu for any questions concerning admission.

Specific Admission Requirements

- Cumulative undergraduate GPA = 3.0 at the end of junior year of the Health Sciences Pre-Athletic Training Emphasis.
- Satisfactory enrollment/completion of the first 90 hours of the Health Science Pre-AT concentration.
- Two letters of recommendation; one from a certified Athletic Trainer and one from an academic instructor.
- 50 observation hours with a certified and state credentialed Athletic Trainer.

Program Admission Provisions

Full Admission-Student has met all the above-noted criteria and has completed a Baccalaureate degree; Students applying in the Junior or final year of undergraduate education with courses in progress will receive notification of full admission with the understanding that the above-noted criteria will be met upon completion of the Junior year or undergraduate education.

Conditional Admission-Student has a GPA between 2.75-2.99 will complete all prerequisite courses with a grade of C or better and meet other application criteria. Students that receive Conditional Admission will be required to earn a GPA of 3.0 in the first MS AT summer session of

the program. Students not meeting this standard will automatically be dismissed from the program.

Deadlines

Students in the Athletic Training 3+2 Program should apply in the spring of the junior year of the Health Science Pre-Athletic Training major. Deadline for first consideration is January 15 and final deadline is May 1. Cohort begin in mid-May and the program starts in the summer and is year round for two years. Please contact the program director, Dr. Mary Placzkowski at mary.placzkowski@csupueblo.edu for any questions concerning admission.

Documents Due After Acceptance into the Program

- Physical Exam
- Full immunization records including proof of COVID vaccination and influenza vaccination by November 1st
- TB test and completed TB form
- Completed technical standards form
- First Aid and CPR/AED for Professional Rescuer certification (or equivalent)

Specific Program Requirements

Students in the BS/MS program must complete:

- The requirements for the BS in Health Science Pre-Athletic Training degree.
- The requirements for the MS in Athletic Training degree.

A maximum of 12 required graduate credits may be applied simultaneously to both the declared undergraduate and graduate degree programs, ***except for programs requiring completion of more than 138 total hours.***

The 3+2 degree plan has the following requirements:

Course	Title	Credits
General Education		18
Undergraduate Required Courses		72
Graduate Required Courses		60
Total Credits		**150**

Undergraduate Requirements

Course	Title	Credits
Required Courses		**34**
AT 232	First Aid	2
AT 234	Emergency Care	2
AT 260	Injury/Illness Care and Prevention	3
AT 301	Physical Assessment	3
AT 323	Functional Exercise Training	2
EPER 162	Personal Health	3
EPER 162L	Personal Health Lab	1
EPER 222	Behavior Facilitation	3
EPER 320	NSCA Test Preparation	3
EPER 343	Research and Statistics	3
EPER 344	Exercise Physiology	3
EPER 344L	Exercise Physiology Lab	1
EPER 364	Kinesiology	3
HS 101	Introduction to Health Professions	2
Outside the Major		**12**
BIOL 100	Principles of Biology (GT-SC2)	3
BIOL 100L	Principles of Biology Lab (GT-SC1)	1
CHEM 111	Principles of Chemistry (GT-SC2) [1]	3
CHEM 111L	Principles of Chemistry Lab (GT-SC1) [1]	1
PHYS 201	Principles of Physics I (GT-SC2)	3
PHYS 201L	Principles of Physics Lab I (GT-SC1)	1
Other Required Courses These courses are required to complete the program, but are also used to fulfill General Education requirements.		**26**
BIOL 112	Nutrition	3
BIOL 220	Medical Terminology	2
BIOL 223	Human Physiology and Anatomy I (GT-SC2)	3
BIOL 223L	Human Physiology and Anatomy I Lab (GT-SC1)	1
BIOL 224	Human Physiology and Anatomy II (GT-SC2)	3
BIOL 224L	Human Physiology and Anatomy II Lab (GT-SC1)	1
CID 103	Speaking & Listening	3
CIS 104	Introduction to Excel Spreadsheets	1
MATH 156	Introduction to Statistics (GT-MA1)	3
PSYC 205	Introduction to Sport Psychology	3
PSYC 151	Human Development (GT-SS3)	3
Total Credits		**72**

[1] Students interested in Physical Therapy, Physician Assistant or Medical School should take CHEM 121 General Chemistry I (GT-SC2) (4 c.h.) & CHEM 121L General Chemistry Lab I (GT-SC1) (1 c.h.).

[2] Students must have a Math placement score of 6 (at least a 24 ACT score or 580 SAT score in Math) to take MATH 156.

Graduate Requirements

Course	Title	Credits
Year 1		**33**
AT 501	Foundations of Athletic Training	3
AT 502	Functional Anatomy of Injury	3
AT 504	Concepts of Therapeutic Interventions	3
AT 510	Clinical Integration I	2
AT 511	Assessment & Management I	4
AT 513	Professionalism and Ethics	1
AT 520	Clinical Integration II	3
AT 521	Assessment and Management II	4
AT 522	General Medical Conditions	5
AT 534	Rehabilitation in Athletic Training	4
AT 535	Pharmacology in Athletic Training	1
Year 2		**27**
AT 503	Fundamentals of Public Health	1
AT 514	Research Methods	2
AT 530	Clinical Integration III	2
AT 531	Assessment & Management III	3
AT 540	Clinical Integration IV	4
AT 542	Administration in Athletic Training	3
AT 545	Evidence-Based Practice & Research	3
AT 550	Clinical Integration V	5
AT 551	BOC Test Prep	1

AT 592	Research	3
Total Credits		**60**

Athletic Training, Master of Science

Athletic trainers (ATs) are highly qualified, multi-skilled health care professionals who render service or treatment, under the direction of or in collaboration with a physician, in accordance with their education, training and the state's statutes, rules and regulations. As a part of the health care team, services provided by athletic trainers include primary care, injury and illness prevention, wellness promotion and education, emergent care, examination and clinical diagnosis, therapeutic intervention and rehabilitation of injuries and medical conditions. Students must complete at Master in Athletic Training to sit for certification.

Accreditation

The Masters in Athletic Training Program At Colorado State University Pueblo located in Pueblo, Colorado is accredited by the:

Commission on Accreditation of Athletic Training Education (CAATE)

2001 K Street NW, 3rd Floor

Washington, DC 20006

844 462-2283

Website: https://caate.net/program-info/697/

Initial Accreditation awarded: 03-02-2022

Students are strongly encouraged to work with the athletic training program, Board of Certification (BOC) and the applicable athletic training licensure board in the state they intend to pursue licensing to ensure all BOC certification and state licensure requirements will be satisfactorily met.

Specific Admission Requirements

Students with a bachelor's degree and that have completed the required prerequisites for the MS in Athletic Training Program may make application to the program.

Students with a bachelors degree applying for the Master of Science in Athletic Training should apply by January 15 for first consideration with a deadline of April 15. Cohort begins in mid-May and the program is year-round for two years. Please contact Dr. Mary Placzkowski at mary.placzkowski@csupueblo.edu for any questions concerning admission.

Documents Due with Application

- Cumulative undergraduate GPA = 3.0.
- Two letters of recommendation; one from a certified Athletic Trainer and one from an academic instructor.
- 50 observation hours with a certified and state credentialed Athletic Trainer.
- Completion of an undergraduate degree by the time the candidate will start the MS in AT.

Program Admission Provisions:

Full Admission-Student has met all the above-noted criteria and has completed a Baccalaureate degree; Students applying in the Junior or final year of undergraduate education with courses in progress will receive notification of full admission with the understanding that the above-noted criteria will be met upon completion of the Junior year or undergraduate education.

Conditional Admission-Student has a GPA between 2.75-2.99 will complete all prerequisite courses with a grade of C or better and meet other application criteria. Students that receive Conditional Admission will be required to earn a GPA of 3.0 in the first MS AT summer session of the program. Students not meeting this standard will automatically be dismissed from the program.

Documents Due After Acceptance into the Program

- Physical Exam
- Full immunization records including COVID vaccination and influenza vaccination by November 1st
- TB test and completed TB form
- Completed technical standards form
- First Aid and CPR/AED for Professional Rescuer certification (or equivalent)

Prerequisite courses with a grade of C or better:

- Anatomy & Physiology I & II with labs
- General Biology with Lab
- Chemistry with Lab
- Physics with Lab
- Psychology
- Exercise Physiology with Lab
- Kinesiology or Biomechanics
- Statistics (Math or Applied Statistics)
- Athletic injury care (including taping/wrapping techniques)

Specific Program Requirements

Course	Title	Credits
Year 1		
AT 501	Foundations of Athletic Training	3
AT 502	Functional Anatomy of Injury	3
AT 504	Concepts of Therapeutic Interventions	3
AT 510	Clinical Integration I	2
AT 511	Assessment & Management I	4
AT 513	Professionalism and Ethics	1
AT 520	Clinical Integration II	3
AT 521	Assessment and Management II	4
AT 522	General Medical Conditions	5
AT 534	Rehabilitation in Athletic Training	4
AT 535	Pharmacology in Athletic Training	1
	Credits	**33**
Year 2		
AT 503	Fundamentals of Public Health	1
AT 514	Research Methods	2
AT 530	Clinical Integration III	2
AT 531	Assessment & Management III	3
AT 540	Clinical Integration IV	4
AT 542	Administration in Athletic Training	3
AT 545	Evidence-Based Practice & Research	3
AT 550	Clinical Integration V	5
AT 551	BOC Test Prep	1

AT 592	Research	3
	Credits	**27**
	Total Credits	**60**

Coaching, Minor

The coaching minor is available to students from all majors and is a great choice for students aspiring to coach individual and team sports.

Click on the curriculum tab to see the courses required for the minor.

Specific Program Requirements

Course	Title	Credits
BIOL 112	Nutrition	3
PSYC 205	Introduction to Sport Psychology	3
AT 260	Injury/Illness Care and Prevention	3
EPER 301	Fitness Technology & Applications	1
EPER 310L	Adv Methods Strength & Conditioning	2
EPER 432	Applied Sport & Exercise Psychology	3
EPER 470	Methods of Coaching	3
EPER	Must be Methods of Coaching course(s) AND/OR EPER 494	2
Total Credits		**20**

Exercise Science, Minor

The exercise science minor is available to all non-EXPER majors. This minor is ideal for other majors interested in exercise science or strength & conditioning.

Specific Program Requirements

- Complete the credit hour requirement of the minor;
- Complete all required coursework with a cumulative GPA of 2.5 or higher;
- Earn a minimum grade of a "C" in all minor courses;
- Repeat minor courses with a grade of "D" or lower until a grade of "C" or higher is achieved;
- Possess content knowledge and skills necessary for their perspective fields of study;
- Evaluate and integrate critical concepts and skills acquired in the EXPER program to common professional problems in the fields of interest; and
- Exhibit effective oral and written communication regarding subjects related to EXPER in an individual and group setting.

(For Non-EXPER Majors)

Course	Title	Credits
Required Courses		
BIOL 112	Nutrition	3
EPER 101	Intro to EXPER	2
EPER 162	Personal Health	3
EPER 162L	Personal Health Lab	1
Minor Electives	Must be EPER. Must be upper division.	9
Additional Electives	Must be within EPER.	2
Total Credits		**20**

EXPER Electives

Course	Title	Credits
EPER 102	Mountain Orientation	2
EPER 103	Winter Orientation	2
EPER 104	Desert Orientation	2
EPER 105	Canyon Orientation	2
EPER 106L	Martial Arts and Self-Defense	1
EPER 108L	Yoga	1
EPER 109L	Volleyball	1
EPER 110L	Weight Training	1
EPER 112L	Rock Climbing	1
EPER 113L	Whitewater Boating	1
EPER 114L	Basic Mountaineering Techniques	1
EPER 116L	Camping	1
EPER 117L	Backpacking	1
EPER 118L	Fly Fishing	1
EPER 119L	Walking for Fitness	1
EPER 120L	Introduction to Search and Rescue	1
EPER 124L	Tai Chi	1
EPER 127L	Jogging	1
EPER 146L	Beginning Swimming	1
EPER 123L	Zumba	1
EPER 125L	Snow Sports	1
EPER 126L	Personal Fitness	1
EPER 128L	Aerobics	1
EPER 174L	Tennis	1
EPER 175L	Racquetball	1
EPER 176L	Life Guard Training	2
EPER 205L	Snow Sports II	1
EPER 208L	Yoga II	1

Exercise Science, Physical Education, & Recreation: General Exercise Science Concentration, Bachelor of Science

The BS degree in EXPER 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 concentration is an excellent selection for students preparing for advanced study in fields such as exercise physiology, heart rehabilitation, coaching, fitness, wellness, or sport administration.

Exercise Science, Physical Education, and Recreation students will:

1. Possess content knowledge and skills necessary for their perspective fields of study.
2. Exhibit the ability to read and interpret scientific research with application of the scientific methods, statistics, study design, and reporting.

3. Evaluate and integrate critical concepts and skills acquired in the EXPER program to common professional problems in the fields of interest.
4. Exhibit effective oral and written communication regarding subjects related to EXPER in individual and group settings.
5. Apply and demonstrate knowledge, skills, and critical problem solving in a field-based setting.

Specific Program Requirements

Course	Title	Credits
Required General Education Courses		**35**
BIOL 223 & 223L	Human Physiology and Anatomy I (GT-SC2) and Human Physiology and Anatomy I Lab (GT-SC1)	4
BIOL 224 & 224L	Human Physiology and Anatomy II (GT-SC2) and Human Physiology and Anatomy II Lab (GT-SC1)	4
CID 103	Speaking & Listening	3
MATH 101	Introductory College Mathematics (GT-MA1)	3
PSYC 151	Human Development (GT-SS3)	3
English		6
History		3
Humanaties		6
Social Science		3
Required Major Courses		**27**
AT 232	First Aid	2
BIOL 112	Nutrition	3
EPER 101	Intro to EXPER	2
EPER 162	Personal Health	3
EPER 162L	Personal Health Lab	1
EPER 222	Behavior Facilitation	3
EPER 343	Research and Statistics	3
EPER 344	Exercise Physiology	3
EPER 344L	Exercise Physiology Lab	1
EPER 364	Kinesiology	3
EPER 461	Managing Events & Programs	3
Required Concentration Courses		**20**
AT 260	Injury/Illness Care and Prevention	3
CIS 100	Introduction to Word	1
CIS 103	Introduction to PowerPoint	1
CIS 104	Introduction to Excel Spreadsheets	1
EPER 201	Drugs and Healthy Lifestyles	3
EPER 436	Exercise Assessment & Prescription	3
EPER 493	Seminar	2
EPER 498	Internship	6
Major Electives	**10 credits must be upper division. Must select from list below.**	**18**
Additional Electives and/or Minor [1]		**20**
Total Credits		**120**

[1] Students must have 40 credits of upper division courses. The major requires 34 credits of upper division.

Major Electives (Select 18 hours. 10 credits must be upper division.)

Course	Title	Credits
EPER 102	Mountain Orientation	2
EPER 103	Winter Orientation	2
EPER 104	Desert Orientation	2
EPER 105	Canyon Orientation	2
EPER 106L	Martial Arts and Self-Defense	1
EPER 107L	Triathlon	1
EPER 108L	Yoga	1
EPER 109L	Volleyball	1
EPER 110L	Weight Training	1
EPER 111	Commitment to Academic Excellence	1
EPER 112L	Rock Climbing	1
EPER 113L	Whitewater Boating	1
EPER 114L	Basic Mountaineering Techniques	1
EPER 116L	Camping	1
EPER 117L	Backpacking	1
EPER 118L	Fly Fishing	1
EPER 119L	Walking for Fitness	1
EPER 120L	Introduction to Search and Rescue	1
EPER 123L	Zumba	1
EPER 124L	Tai Chi	1
EPER 125L	Snow Sports	1
EPER 126L	Personal Fitness	1
EPER 127L	Jogging	1
EPER 128L	Aerobics	1
EPER 146L	Beginning Swimming	1
EPER 175L	Racquetball	1
EPER 176L	Life Guard Training	2
PSYC 205	Introduction to Sport Psychology	3
EPER 205L	Snow Sports II	1
EPER 208L	Yoga II	1
EPER 211	Commitment to Service	1
HS 230	Foundations of Public Health	3
EPER 233	History & Principles of Physical Education & Rec	2
EPER 240	Recreation Program Design	3
EPER 243	Methods of Rhythmic Activities	2
EPER 245	Motor Learning and Development	3
EPER 246L	Methods of Swimming	1
EPER 250	Commercial Recreation and Tourism	3
EPER 249	Challenge Course Leadership	2
EPER 270	Outdoor Leadership I	2
EPER 280	Foundations of Therapeutic Recreation	3
EPER 301	Fitness Technology & Applications	1
EPER 310L	Adv Methods Strength & Conditioning	2
EPER 320	NSCA Test Preparation	3
EPER 322	Wilderness First Aid	2
AT 323	Functional Exercise Training	2
HS 330	Epidemiology & Disease Prevention	3
EPER 345	Methods of Physical Activities & Games I	2
EPER 346	Methods Physical Activities & Games II	2

EPER 347	Methods of Fitness Instruction	1
EPER 348	Methods of Individual and Dual Sports	3
EPER 349	Methods of Outdoor PE & Sustainability	2
EPER 350	Leadership & Ethics	3
EPER 360	Outdoor Education	3
EPER 362	Methods of Health Education	3
EPER 375	Research & Evaluation of Recreation	3
EPER 432	Applied Sport & Exercise Psychology	3
EPER 440	Biomechanics	3
EPER 464	Adapted Physical Education	3
EPER 469	Coaching/Officiating Track & Field	2
EPER 470	Methods of Coaching	3
EPER 471	Coaching & Officiating Football	2
EPER 472	Coaching and Officiating Basketball	2
EPER 475	Coaching and Officiating Volleyball	2
EPER 480	Business of Tourism	3
EPER 482	Coaching and Officiating Wrestling	2
EPER 483	Coaching and Officiating Baseball	2
EPER 484	Outdoor Resources & Management	3
EPER 485	Recreation Facility Design/Management	3
EPER 486	Coaching And Officiating Soccer	2
EPER 492	Research	1-6
EPER 494	Field Experience	1-6
EPER 495	Independent Study	1-5

Specific Graduation Requirements

All HSHM Majors are required to:

- Complete a concentration of study with a cumulative GPA of 2.50 or higher;
- Earn a 2.0 overall GPA to enroll in 300 or 400-level courses in the department;
- Earn a minimum grade of a “C” in all prerequisite and major courses;
- Repeat prerequisite and major courses with a grade of “D” or lower until a grade of “C” or higher is achieved;
- Earn a cumulative GPA of 2.0 or higher in required English and speech communication courses;
- Earn at least 120 credit hours with at least 40 upper-division credits;
- Successfully complete an internship or field experience course; and
- Submit a graduation contract by the deadline the semester of graduation.

Exercise Science, Physical Education, & Recreation: K-12 Physical Education Teacher Preparation Concentration, Bachelor of Science

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

- Graduates of the Physical Education K-12 Teacher Preparation concentration who also complete the Teacher Education program, and receive a passing score on the Colorado Department of Education PRAXIS 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 and will be certified Kindergarten to 12th grade for Physical Education. Students can also consider the 3+2 degree in EXPER and Masters in Education.

Selective Entry & 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 (https://catalog.csupueblo.edu/search/?P=ED%20301) Frameworks of Teaching (4 c.h.). 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 (https://catalog.csupueblo.edu/search/?P=ENG%20101) Rhetoric & Writing I (GT-CO1) (3 c.h.) and ENG 102 (https://catalog.csupueblo.edu/search/?P=ENG%20102) Rhetoric & Writing II (GT-CO2) (3 c.h.) with grades of C or better.
3. For students pursuing secondary or K-12 licensure, completion of math course required by major field with a grade of C or better[1]. For students pursuing elementary or early childhood education: completion of one course that meets General Education requirements with a C or better[1].
4. Completion of CID 103 (https://catalog.csupueblo.edu/search/?P=CID%20103) Speaking & Listening (3 c.h.) or CID 221 (https://catalog.csupueblo.edu/search/?P=CID%20221) Interpersonal Communication (3 c.h.)with a grade of C or better.
5. Completion of ED 301 (https://catalog.csupueblo.edu/search/?P=ED%20301) Frameworks of Teaching (4 c.h.) with a grade of C or better.
6. Completion of a formal, standardized test during ED 301 (https://catalog.csupueblo.edu/search/?P=ED%20301) Frameworks of Teaching (4 c.h.) 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:
   a. transcripts and official documents demonstrating students performance in University classes,
   b. materials developed in University classes which demonstrate proficiency on specific education standards,
   c. recommendations and evaluations from teachers,
   d. materials used in field experiences and videos of teaching,
   e. personal reflections and summaries about progress, and
   f. 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).
9. [1]
10. The Associate Dean will evaluate transfer courses for admission purposes.

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 School of Education. Additional details related to program retention are included in the *School of 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. *Please note that no state test is required to be licensed in K-12 and Secondary endorsements, and so none are required for admission to student teaching for these majors as well.*
6. Successful completion of an education portfolio. Six types of materials will be submitted with the portfolio:
   a. transcripts and official documents demonstrating students performance in University classes,
   b. materials developed in University classes which demonstrate proficiency on specific education standards.
   c. recommendations and evaluations from teachers,
   d. materials used in field experience and videos of teaching, and
   e. personal reflections and summaries about progress.
   Specific portfolio requirements and manner of evaluation are included in the appendices to the *Teacher Education Handbook*. All portfolios will be submitted in electronic format (website).
7. Successful completion of all required early field experience hours and cooperating teacher evaluations. Hours must include work at the appropriate levels and in a variety of diverse high need settings.
8. Completion of any support plans.
9. Submission of current satisfactory background check from the Colorado Bureau of Investigation.

Applications must be submitted a semester in advance; the deadline for the application is 5:00pm on Wednesday of week 3 of classes. Student teaching requires full time effort; therefore students may not enroll in University courses other than Student Teaching and Capstone Seminar without permission of the Associate Dean.

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.

For students who are interested in pursuing teacher licensure in states other than Colorado: You are strongly encouraged to work with the academic department and the applicable professional licensure board in the state in which you intend to pursue licensing to ensure all licensure requirements will be satisfactorily met.

Performance Assessment Activities

In the School of Education, 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 School of Education Office.

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 can be found on the program's website: https://www.csupueblo.edu/institutional-research/student-outcomes/licensure-exams.html.

Student Learning Outcomes

- Possess content knowledge and skills necessary for their perspective fields of study.
- Exhibit the ability to read and interpret scientific research with application of the scientific methods, statistics, study design, and reporting;
- Evaluate and integrate critical concepts and skills acquired in the EXPER program to common professional problems in the fields of interest;
- Exhibit effective oral and written communication regarding subjects related to EXPER in an individual and group setting.
- Apply and demonstrate knowledge, skills and critical problem solving in a field-based setting.

Specific Program Requirements

Specific Core Requirements

Course	Title	Credits
AT 232	First Aid	2
BIOL 112	Nutrition	3
EPER 101	Intro to EXPER	2
EPER 162	Personal Health	3

EPER 162L	Personal Health Lab	1
EPER 222	Behavior Facilitation	3
EPER 343	Research and Statistics	3
EPER 344	Exercise Physiology	3
EPER 344L	Exercise Physiology Lab	1
EPER 364	Kinesiology	3
EPER 461	Managing Events & Programs	3
Total Credits		**27**

Specific Concentration Requirements

Course	Title	Credits
Required EPER Core Courses		
EPER Core Courses		27
Required Concentration Courses		
AT 260	Injury/Illness Care and Prevention	3
AT 323	Functional Exercise Training	2
EPER 233	History & Principles of Physical Education & Rec	2
EPER 243	Methods of Rhythmic Activities	2
EPER 245	Motor Learning and Development	3
EPER 345	Methods of Physical Activities & Games I	2
EPER 346	Methods Physical Activities & Games II	2
EPER 347	Methods of Fitness Instruction	1
EPER 348	Methods of Individual and Dual Sports	3
EPER 349	Methods of Outdoor PE & Sustainability	2
EPER 351	Methods of Teaching Elem Physical ED	3
EPER 362	Methods of Health Education	3
EPER 470	Methods of Coaching	3
EPER 478	Methods of Secondary Physical Education	3
Select 1 credit from the following:		1
EPER 146L	Beginning Swimming	1
EPER 176L	Life Guard Training	2
EPER 246L	Methods of Swimming	1
EPER 276L	Water Safety Instructor Certification	2
Other Required Courses		
BIOL 223	Human Physiology and Anatomy I (GT-SC2)	3
BIOL 223L	Human Physiology and Anatomy I Lab (GT-SC1)	1
CID 103	Speaking & Listening	3
MATH 101	Introductory College Mathematics (GT-MA1)	3
PSYC 151	Human Development (GT-SS3) (Must take for Gen Ed and counts in Education minor)	3
ANTH 100	Cultural Anthropology (GT-SS3)	3
General Education: English		6
General Education: History		3
General Education: Humanities		6
Education Minor		
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology	3
ED 301	Frameworks of Teaching	4
ED 485	Capstone Seminar in Education	1
ED 489	Student Teaching K-12	12
EPER 465	Adapted Physical Education	3
RDG 435	Disciplinary Literacy	4
Total Credits		**123**

[1] Providing either PSYC 151 Human Development (GT-SS3) (3 c.h.) or PSYC 251 Childhood and Adolescence (3 c.h.) in Education minor courses.

Specific Graduation Requirements

EXPER Physical Education K-12 Students are required to:

- Complete a concentration of study with a cumulative GPA of 2.60 or higher;
- Complete a minor in Education with a C or better in each course;
- Complete MATH 101 with at least a C or better;
- Complete a satisfactory background check with the Colorado Bureau of Investigation;
- Complete an education portfolio.
- Successfully pass the Physical Education PRAXIS exam and student teaching;
- Earn a 2.0 overall GPA to enroll in 300 or 400-level courses in the department;
- Earn a minimum grade of a "C" in all prerequisite and major courses;
- Repeat prerequisite and major courses with a grade of "D" or lower until a grade of "C" or higher is achieved; and
- Earn a cumulative GPA of 2.0 or higher in required English and speech communication courses.
- Earn at least 123 credit hours with at least 40 upper-division credits.
- Successfully complete student teaching.
- Submit a graduation contract by the deadline the semester of graduation.

See the School of Education Webpage for a full explanation of the above criteria.

Exercise Science, Physical Education, & Recreation: K-12 Teacher Preparation Concentration 3+2 Plan, Integrated Bachelor of Science/ Master of Education: Health & Physical Education Concentration

The 3+2 Program offers students the unique opportunity to graduate with both a Baccalaureate and Master's degree in 5 years. Students will earn a BS degree in Exercise Science, Physical Education and Recreation with a Physical Education concentration and a minor in Education and an MEd degree in Education. Students will attain certification K-12 in Physical Education and an endorsement in Health. Talented students are thus quickly moved toward expanding their academic and scientific horizons based on an individual student's abilities and motivation.

Student who are interested in becoming a Certified Teacher will begin their degree in the BS in Exercise Science, Physical Education and Recreation K-12 Physical Education concentration. In the Junior Year students can apply to the School of Education which will result in a BS degree in EXPER and an MEd degree in Education after completing

106 credits of undergraduate work and 38 credits of graduate work. Students must meet the requirements of both degrees (BS in EXPER K-12 Physical Education and MEd In Education). Students who decide not to apply to the 3+2 program can graduate with a BS in EXPER K-12 Physical Education concentration with 123 credits of undergraduate course work.

By at least the third year of the program, students must apply to the School of Education and the 3+2 Program. Please see the admission tab for full admission information.

Specific Admission Requirements

Students complete the admission to education process during ED 301 (https://catalog.csupueblo.edu/search/?P=ED%20301) Frameworks of Teaching (4 c.h.). 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 and to the 3+2 program. No exceptions can occur to these requirements:

1. Cumulative grade point of 3.000 or better for admission to the 3+2 program to earn the graduate degree.
2. Completion of ENG 101 (https://catalog.csupueblo.edu/search/?P=ENG%20101) Rhetoric & Writing I (3 c.h.) and ENG 102 (https://catalog.csupueblo.edu/search/?P=ENG%20102) Rhetoric & Writing II (3 c.h.) with grades of C or better.
3. For students pursuing secondary or K-12 licensure, completion of math course required by major field with a grade of C or better[1].
4. Completion of CID 103 (https://catalog.csupueblo.edu/search/?P=COMR%20103) Speaking and Listening (3 c.h.) or CID 221 Interpersonal Communication (3 c.h.) with a grade of C or better.
5. Completion of ED 301 (https://catalog.csupueblo.edu/search/?P=ED%20301) Frameworks of Teaching (4 c.h.) with a grade of C or better.
6. Completion of a formal, standardized test during ED 301 (https://catalog.csupueblo.edu/search/?P=ED%20301) Frameworks of Teaching (4 c.h.) 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:
   a. transcripts and official documents demonstrating students performance in University classes,
   b. materials developed in University classes which demonstrate proficiency on specific education standards,
   c. recommendations and evaluations from teachers,
   d. materials used in field experiences and videos of teaching,
   e. personal reflections and summaries about progress, and
   f. 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).
9. Completion of at least 60 credits of undergraduate coursework and junior status.

Student Learning Outcomes

Exercise Science, Physical Education, & Recreation students will:

- Possess content knowledge and skills necessary for their perspective fields of study.
- Exhibit the ability to read and interpret scientific research with application of the scientific methods, statistics, study design, and reporting;
- Evaluate and integrate critical concepts and skills acquired in the EXPER program to common professional problems in the fields of interest;
- Exhibit effective oral and written communication regarding subjects related to EXPER in individual and group setting.
- Apply and demonstrate knowledge, skills and critical problem solving in a field-based setting.

The assessment plan for Colorado State University Pueblo's M.Ed. ensures that the program:

- Monitors individual student progress necessary to support success,
- Provides summative information on student proficiency on all performance-based standards, and
- Provides reliable and valid information on the program's successes and weaknesses to ensure continuous program improvement.

Specific Program Requirements

Students in this integrated program has the following requirements:

Course	Title	Credits
General Education [1]		35
BS EXPER: K-12 Concentration		51
Education Minor (UG & GR) Courses		29
MED: Health & Physical Education Concentration		29
Total Credits		**144**

[1] This program requires specific General Education courses. See the Undergraduate Requirements section for course list.

Undergraduate Requirements

Course	Title	Credits
General Education		**23**
ANTH 100	Cultural Anthropology (GT-SS3)	3
BIOL 223 & 223L	Human Physiology and Anatomy I (GT-SC2) and Human Physiology and Anatomy I Lab (GT-SC1)	4
CID 103	Speaking & Listening	3
ENG 101	Rhetoric & Writing I (GT-CO1) [1/2]	3
EPER 162 & 162L	Personal Health and Personal Health Lab	4
PSYC 151	Human Development (GT-SS3)	3
MATH 101	Introductory College Mathematics (GT-MA1)	3
In addition, complete the following:		
English		3
History		3

Humanities		6
Total Credits		**35**

Course	Title	Credits
Required Major Courses		
AT 232	First Aid	2
BIOL 112	Nutrition	3
EPER 101	Intro to EXPER	2
EPER 162	Personal Health Hours counted in General Education	0
EPER 162L	Personal Health Lab Hours counted in General Education	0
EPER 222	Behavior Facilitation	3
EPER 343	Research and Statistics	3
EPER 344	Exercise Physiology	3
EPER 344L	Exercise Physiology Lab	1
EPER 364	Kinesiology	3
EPER 461	Managing Events & Programs	3
Required Concentration Courses		
AT 260	Injury/Illness Care and Prevention	3
AT 323	Functional Exercise Training	2
EPER 233	History & Principles of Physical Education & Rec	2
EPER 243	Methods of Rhythmic Activities	2
EPER 245	Motor Learning and Development	3
EPER 345	Methods of Physical Activities & Games I	2
EPER 346	Methods Physical Activities & Games II	2
EPER 347	Methods of Fitness Instruction	1
EPER 348	Methods of Individual and Dual Sports	3
EPER 362	Methods of Health Education	3
EPER 470	Methods of Coaching	3
Choose 1 credit from the courses below		1
EPER 102	Mountain Orientation	2
EPER 103	Winter Orientation	2
EPER 104	Desert Orientation	2
EPER 105	Canyon Orientation	2
EPER 106L	Martial Arts and Self-Defense	1
EPER 107L	Triathlon	1
EPER 108L	Yoga	1
EPER 109L	Volleyball	1
EPER 110L	Weight Training	1
EPER 112L	Rock Climbing	1
EPER 113L	Whitewater Boating	1
EPER 114L	Basic Mountaineering Techniques	1
EPER 116L	Camping	1
EPER 117L	Backpacking	1
EPER 118L	Fly Fishing	1
EPER 119L	Walking for Fitness	1
EPER 123L	Zumba	1
EPER 124L	Tai Chi	1
EPER 125L	Snow Sports	1
EPER 126L	Personal Fitness	1
EPER 127L	Jogging	1
EPER 128L	Aerobics	1
EPER 175L	Racquetball	1
Choose 1 credit from the courses below		1
EPER 146L	Beginning Swimming	1
EPER 176L	Life Guard Training	2
EPER 246L	Methods of Swimming	1
EPER 276L	Water Safety Instructor Certification	2
Total Credits		**51**

Course	Title	Credits
Education Minor		
ED 202	Foundations of Education	3
ED 301	Frameworks of Teaching	4
ED 485	Capstone Seminar in Education	1
ED 489	Student Teaching K-12	12
ED 520	Educational Media and Technology	3
RDG 535	Advanced Disciplinary Literacy	3
EPER 565	Adapted Physical Education	3
Total Credits		**29**

Graduate Requirements

Course	Title	Credits
Required MED Courses		
ED 502	Teacher As Change Agent	3
ED 503	Teacher as Researcher	3
ED 504	Leading Change in America's Schools	3
ED 593	Seminar	2
EPER 522	Methods of Elementary Physical Education	3
EPER 549	Facilitation of Adventure Education	3
EPER 562	Contemporary Issues In Hpe	3
EPER 578	Methods of Secondary School PE	3
HS 520	Advanced Evaluation of Health Issues	3
HS 536	Community & Global Health Application	3
Total Credits		**29**

Specific Graduation Requirements

EXPER / MEd 3+2 Students are required to:

- Complete an undergraduate concentration of study with a cumulative GPA of 3.000 or higher;
- Complete the minor in Education with a C or better in each course;
- Complete MATH 101 with at least a C or better;
- Complete a satisfactory background check with the Colorado Bureau of Investigation;
- Complete an education portfolio.
- Successfully pass the Physical Education PRAXIS exam and student teaching;
- Successfully complete the 24 hours for the K-12 Health Endorsement;
- Earn a 2.0 overall GPA to enroll in 300 or 400 level courses in the department;
- Earn a minimum grade of a “C” in all prerequisite and major courses;
- Repeat prerequisite and major courses with a grade of “D” or lower until a grade of “C” or higher is achieved; and
- Earn a cumulative GPA of 2.0 or higher in required English and speech communication courses.

- Earn at least 144 credit hours with at least 40 upper division credits and at least 38 graduate hours.
-
- All students must fulfill the following requirements for a graduate degree:
- A cumulative graduate GPA of 3.000 or better in graduate courses at 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 and program director, in accordance with published deadlines during the semester is to occur. The deadline for submission is published in the *Semester Notes*, *University Calendar*, and *CSU Pueblo Catalog*.

See the School of Education Webpage for a full explanation of the above criteria.

Exercise Science, Physical Education, & Recreation: Recreation Concentration, Bachelor of Science

The Recreation Concentration offers two areas to choose from:

- Outdoor Leadership & Wilderness Education
- Recreation Management

Completion of the Recreation concentration prepares graduates to work in positions of leadership in a variety of recreational service agencies in the community and outdoors. 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 as well as hospital and therapeutic settings. Students completing the Recreation Management area are eligible to sit for the Certified Park and Recreation Professional (CPRP). Students who participate in the Outdoor Leadership and Wilderness Education area 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.

Exercise Science, Physical Education, and Recreation students will:

1. Possess content knowledge and skills necessary for their perspective fields of study.
2. Exhibit the ability to read and interpret scientific research with application of the scientific methods, statistics, study design, and reporting;
3. Evaluate and integrate critical concepts and skills acquired in the EXPER program to common professional problems in the fields of interest;
4. Exhibit effective oral and written communication regarding subjects related to EXPER in individual and group setting.
5. Apply and demonstrate knowledge, skills and critical problem solving in a field-based setting.

Student Learning Outcomes for emphasis areas can be found on the EXPER curriculum maps.

Specific Program Requirements

Course	Title	Credits
EPER 101	Intro to EXPER	2
Select 2 credits from the following:		2
EPER 112L	Rock Climbing	1
EPER 113L	Whitewater Boating	1
EPER 114L	Basic Mountaineering Techniques	1
EPER 116L	Camping	1
EPER 117L	Backpacking	1
EPER 118L	Fly Fishing	1
EPER 120L	Introduction to Search and Rescue	1
EPER 125L	Snow Sports	1
EPER 205L	Snow Sports II	1
EPER 240	Recreation Program Design	3
EPER 249	Challenge Course Leadership	2
EPER 250	Commercial Recreation and Tourism	3
EPER 270	Outdoor Leadership I	2
EPER 280	Foundations of Therapeutic Recreation	3
EPER 322	Wilderness First Aid	2
EPER 350	Leadership & Ethics	3
EPER 360	Outdoor Education	3
EPER 375	Research & Evaluation of Recreation	3
EPER 389	Recreation Practicum	3
EPER 461	Managing Events & Programs	3
EPER 484	Outdoor Resources & Management	3
EPER 485	Recreation Facility Design/Management	3
EPER 493	Seminar	2
EPER 498	Internship	12
CIS 103	Introduction to PowerPoint	1
CIS 104	Introduction to Excel Spreadsheets	1
Total Credits		**56**

Specific Concentration Requirements

Students pursuing the Recreation concentration are required to select either Outdoor Leadership & Wilderness Education or Recreation Management.

Outdoor Leadership & Wilderness Education Option Requirements

Course	Title	Credits
Required Courses		
Recreation Core Courses		56
Outdoor Leadership & Wilderness Education Option Requirements		
Select two of the following courses:		4
EPER 102	Mountain Orientation	2
EPER 103	Winter Orientation	2
EPER 104	Desert Orientation	2

EPER 105	Canyon Orientation	2
GEOL 101	Earth Science (GT-SC2)	3
EPER 345	Methods of Physical Activities & Games I	2
BIOL 461	Applied Geospatial Technology (GIS/GPS)	3
Hours Outside the Major		
Select 17 credits		17
General Education Requirements		
MATH		3
Social Sciences		3
PSYC 151	Human Development (GT-SS3)	3
General Education: English		6
Humanities		6
CID 103	Speaking & Listening	3
History		3
Natural and Physical Science		4
BIOL 121	Environmental Conservation (GT-SC2)	3
BIOL 121L	Environmental Conservation Lab (GT-SC1)	1
Total Credits		**120**

Recreation Management Option Requirements

Course	Title	Credits
Required Courses		
Recreation Core Courses		56
Recreation Management Option Requirements		
MGMT 201	Principles of Management	3
MGMT 318	Human Resource Management	3
MKTG 340	Principles of Marketing	3
Select one of the following:		3
EPER 480	Business of Tourism	3
MKTG 342	Promotional Strategy	3
MKTG 345	Retail Management	3
MKTG 348	Consumer Behavior	3
Hours Outside the Major		
Select 17 credits		17
General Education Requirements		
MATH		3
Social Sciences		3
PSYC 151	Human Development (GT-SS3)	3
General Education: English		6
Humanities		6
CID 103	Speaking & Listening	3
History		3
Natural and Physical Science		8
Total Credits		**120**

All HSHM Majors are required to:

- Complete a concentration of study with a cumulative GPA of 2.50 or higher.
- Earn a 2.0 overall GPA to enroll in 300 or 400-level courses in the department;
- Earn a minimum grade of a “C” in all prerequisite and major courses;
- Repeat prerequisite and major courses with a grade of “D” or lower until a grade of “C” or higher is achieved; and
- Earn a cumulative GPA of 2.0 or higher in required English and speech communication courses.
- Earn at least 120 credit hours with at least 40 upper-division credits.
- Successfully complete an internship or field experience course.
- Submit a graduation contract by the deadline the semester of graduation.

Exercise Science, Physical Education, & Recreation: Strength & Conditioning Concentration, Bachelor of Science

The Strength & Conditioning concentration is designed from the National Strength & Conditioning Association (NSCA) standards and CSU Pueblo is a recognized school with the NSCA. The course work includes classes on:

- human anatomy & physiology,
- exercise physiology,
- kinesiology/biomechanics,
- nutrition,
- principles of strength & conditioning
- exercise technique/exercise prescription with concentration in anaerobic exercise,
- and program design as related to strength & conditioning.

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

- Graduates of the Strength & Conditioning Concentration are prepared to take the National Strength & Conditioning Association Certified Strength and Conditioning Specialist exam. Graduates can find employment in fitness and recreation facilities, high school & college athletics, and allied health industries.

Exercise Science, Physical Education, and Recreation students will:

1. Possess content knowledge and skills necessary for their perspective fields of study.
2. Exhibit the ability to read and interpret scientific research with application of the scientific methods, statistics, study design, and reporting;
3. Evaluate and integrate critical concepts and skills acquired in the EXPER program to common professional problems in the fields of interest;
4. Exhibit effective oral and written communication regarding subjects related to EXPER in individual and group setting.
5. Apply and demonstrate knowledge, skills and critical problem solving in a field-based setting.

Student Learning Outcomes for emphasis areas can be found on the EXPER curriculum maps.

Specific Program Requirements

Course	Title	Credits
Required General Education Courses		**35**
BIOL 223 & 223L	Human Physiology and Anatomy I (GT-SC2) and Human Physiology and Anatomy I Lab (GT-SC1)	4
BIOL 224 & 224L	Human Physiology and Anatomy II (GT-SC2) and Human Physiology and Anatomy II Lab (GT-SC1)	4
CID 103	Speaking & Listening	3
MATH 101	Introductory College Mathematics (GT-MA1)	3
PSYC 151	Human Development (GT-SS3)	3
English		6
History		3
Humanities		6
Social Science		3
Required Major Courses		**27**
AT 232	First Aid	2
BIOL 112	Nutrition	3
EPER 101	Intro to EXPER	2
EPER 162 & 162L	Personal Health and Personal Health Lab	4
EPER 222	Behavior Facilitation	3
EPER 343	Research and Statistics	3
EPER 344 & 344L	Exercise Physiology and Exercise Physiology Lab	4
EPER 364	Kinesiology	3
EPER 461	Managing Events & Programs	3
Required Concentration Courses		**42**
AT 260	Injury/Illness Care and Prevention	3
AT 323	Functional Exercise Training	2
CIS 104	Introduction to Excel Spreadsheets	1
EPER 110L	Weight Training	1
EPER 201	Drugs and Healthy Lifestyles	3
EPER 301	Fitness Technology & Applications	1
EPER 310L	Adv Methods Strength & Conditioning	2
EPER 320	NSCA Test Preparation	3
EPER 350	Leadership & Ethics	3
EPER 432	Applied Sport & Exercise Psychology	3
EPER 436	Exercise Assessment & Prescription	3
EPER 440	Biomechanics	3
EPER 493	Seminar	2
EPER 498	Internship	6
HS 330 or AT 301	Epidemiology & Disease Prevention Physical Assessment	3
PSYC 205	Introduction to Sport Psychology	3
Electives or Minor		**16**
Total Credits		**120**

All HSHM Majors are required to:

- Complete a concentration of study with a cumulative GPA of 2.50 or higher.
- Earn a 2.0 overall GPA to enroll in 300 or 400-level courses in the department;
- Earn a minimum grade of a "C" in all prerequisite and major courses;
- Repeat prerequisite and major courses with a grade of "D" or lower until a grade of "C" or higher is achieved; and
- Earn a cumulative GPA of 2.0 or higher in required English and speech communication courses.
- Earn at least 120 credit hours with at least 40 upper-division credits.
- Successfully complete an internship or field experience course.
- Submit a graduation contract by the deadline the semester of graduation.

Fitness & Recreational Sports Management, Minor

The fitness & recreational sports management minor is ideal for business students, recreation students, or any student interested in managing fitness & recreational sports facilities.

Specific Program Requirements

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
EPER 240	Recreation Program Design	3
EPER 485	Recreation Facility Design/Management	3
MGMT 201 or EPER 461	Principles of Management Managing Events & Programs	3
MGMT 318	Human Resource Management [1]	3
Select two of the following:		**6**
CIS 365	Management Information Systems [1]	3
EPER 250	Commercial Recreation and Tourism	3
EPER 480	Business of Tourism	3
EPER 484	Outdoor Resources & Management	3
MKTG 342	Promotional Strategy [1]	3
MKTG 348	Consumer Behavior [1]	3
Total Credits		**21**

[1] These courses require prerequisites to be taken prior to taking course.

Health & Fitness Certification for the Department of Corrections

This is a Health and Fitness Certification developed specifically for students in the Colorado Department of Corrections. The 12 credit hour certification will prepare students to sit for a personal training certificate and work in a variety of fitness locations. The certificate is limited to students in the Colorado Department of Corrections.

Specific Admission Requirements

Students must be in the Colorado Department of Corrections. Students must have a high school diploma and be eligible for admission to CSU Pueblo.

Goals

The goal of this certificate is to prepare Department of Corrections students to sit for a personal training certificate and increase their chances of finding employment.

Outcomes

1. Possess content knowledge and skills necessary for their perspective fields of study.
2. Evaluate and integrate critical concepts and skills acquired in the EXPER program to common professional problems in the fields of interest;
3. Exhibit effective oral and written communication regarding subjects related to EXPER in an individual and group setting.

Specific Program Requirements

Course	Title	Credits
EPER 101	Intro to EXPER	2
EPER 110L	Weight Training	1
EPER 126L	Personal Fitness	1
EPER 162	Personal Health	3
EPER 222	Behavior Facilitation	3
AT 230	CPR & Sudden Illness & Injury Recognition	1
EPER 347	Methods of Fitness Instruction	1
Total Credits		**12**

Health Coaching, Minor

The health coaching minor is available to students who are interested in expanding their knowledge of coaching individuals through health behavior change and is ideal for students majoring in psychology, sociology, social work, and EXPER who would like to work in behavioral health, in private industry and case management.

Specific Program Requirements

Course	Title	Credits
EPER 222	Behavior Facilitation	3
HS 322	Health Coaching Concepts	3
HS 330	Epidemiology & Disease Prevention	3
PSYC 362	Abnormal Psychology	3
PSYC 405	Positive Psychology	3
HS 422	Applied Health Coaching	3
PSYC 471	Clinical Psychology	3
Total Credits		**21**

Health Science & Administration, Bachelor of Applied Science

This online applied bachelor's degree is open to aspiring students who currently hold an AAS, AGS or AS degree in a healthcare, allied health, or public health fields. This degree is available online through the Division of Extended Studies. The program bridges allied healthcare professionals who hold a two-year degree and current healthcare licensure or certification to a four year BAS degree. Students will learn complementary, communication, technical and administrative skills necessary to enhance their preparation for working in these industries. Choosing a health science BAS degree prepares students for a robust and versatile advanced career in a large interdisciplinary healthcare arena. Graduates have many career options in a variety of settings such as schools, hospitals, government agencies, private or community agencies, or in non-profit groups. Graduates will be able to return to higher level and/or administrative positions in their original allied healthcare fields such as radiology, nuclear imaging, physical therapy assistant, medical assisting, emergency medication technicians, etc. Other career options include positions such as: home health care coordinator, health maintenance organization care coordinator, insurance company health coach, long-term care health coordinator, women, infants, children nutrition coordinator, health navigator, and any number of other related careers.

Students must have a valid state or national allied health-related certificate or license to be awarded escrow credits. Escrow credits are a block of credits awarded for the attainment of the professional allied health license or certificate that will be held in escrow and will be awarded at the end of the program.

Students accepted to this program must meet a 19-credit hour requirement for general education including written communication, social science, natural and physical science, humanities, and mathematics. If the students do not have these courses that meet the philosophy of general education, they will be required to obtain them at CSU Pueblo.

Students must complete at least 120 credit hours total with at least 40 credit hours in upper-division credits. The number of credits required at CSU Pueblo to complete the BAS degree will depend on how many hours the student transfers and the number of escrow hours awarded. See the program director or the advisor to determine the number of transfer hours and escrow credits to be awarded.

Specific Admission Requirements

Students must have an earned AAS, AGS, or AS degree in an allied health-related field to be admitted to the program or permission from the program Dean.

Students must have a valid state or national certificate, or license to be awarded escrow credits. Escrow credits are a block of credits awarded for the attainment of the professional allied health license or certificate that will be held in escrow and will be awarded at the end of the program. Escrow credits and other transfer credits should be determined the first semester the student is enrolled in the program.

The number of credits in the program vary depending on how many credits are transferred, petitioned, or awarded in escrow. Please work with the advisor for the program.

Student Learning Outcomes

The BS in Health Science Student Learning Outcomes are as follows:

1. Summarize and synthesize information relevant to assessing and improving population health and healthcare issues;
2. Exhibit the ability to read and interpret scientific research with application of the scientific methods, statistics, study design, and reporting in the health sciences;
3. Evaluate and integrate critical concepts and skills acquired in the health sciences curriculum to common professional problems in the health science fields of interest;

4. Exhibit effective oral and written communication as well as mass communication regarding subjects related to the health sciences in an individual and group setting;
5. Apply and demonstrate knowledge, skills and critical problems solving in a field-based and/or clinical setting;

Specific Program Requirements

Students accepted to this program must meet a 19-credit hour requirement for general education including written communication, social science, natural and physical science, humanities, mathematics, and one 3-credit upper-division sociology course. If the students do not have these courses that meet the philosophy of general education outlined prior, they will be required to obtain them.

Furthermore, this BAS may include up to 30 escrow credit hours (see the Academic Policies section of the catalog), which will be posted the semester prior to anticipated graduation. See the program director or advisor to determine the number of transfer and escrow credits to be awarded. The transfer, petitioned, and escrow hours should be determined in the student's first semester.

Required Courses

21 credits and General Education 19 credits for a total of 40 credits

Course	Title	Credits
HS 320	Evaluation of Health Issues	3
HS 325	Health Communication	3
HS 330	Epidemiology & Disease Prevention	3
HS 335	Public Health and the Environment	3
HS 336	Community and Global Health	3
HS 492	Research	3
HS 494	Field Experience (Required Courses)	3
Choose one of the following courses.		3
SOC 310	Social & Cultural Theory	3
SOC 404	Poverty and Inequality in the U.S.	3
SOC 315	Health, Culture, and Society	3
General Education English		3
General Education Humanities		3
General Education Social Science		3
General Education Mathematics		3
General Education Natural and Physical Science		4
Total Credits		**40**

Electives

9 upper division credits at the minimum. (Students may need more credits depending on transfer and escrow credits. Students may take up to 38 credits with 19 upper-division credits in this section depending on their transfer and escrow credits).

Course	Title	Credits
Choose 9 or more credits (depending on transfer and escrow credits)		**9**
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
BSAD 270	Business Communications	3
BSAD 302	Ethics in Business	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	3
EPER 162	Personal Health	3
EPER 162L	Personal Health Lab	1
HS 402	Grant Writing & Community Partnerships	3
MATH 156	Introduction to Statistics (GT-MA1)	3
MGMT 201	Principles of Management	3
MGMT 301	Organizational Behavior (Select 18 hours with at least 15 upper division)	3
MGMT 311	Operations and Quality Management	3
MGMT 318	Human Resource Management	3
MGMT 362	Purchasing and Materials Management	3
MGMT 460	Operations Strategy	3
MGMT 468	Quality Management	3
MGMT 485	Strategic Management	3
MKTG 340	Principles of Marketing	3
MKTG 341	Sales Force Management	3
PSYC 342	Educational Psychology	3
PSYC 362	Abnormal Psychology	3
SOC 315	Health, Culture, and Society	3
SOC 310	Social & Cultural Theory	3
SOC 352	Social Psychology	3
SOC 404	Poverty and Inequality in the U.S.	3
SW 100	Introduction to Social Work	3
SW 201	Human Behavior and Social Environment I	3
SW 202	Human Behavior and Social Environment II	3
SW 205	Social Welfare in the United States (GT-SS1)	3

Specific Graduation Requirements

Students are required to complete an approved program with a cumulative GPA of 2.0000 or higher.

Students are required to complete 120 total credits and at least 40 upper division credits (including escrow hours).

Students are required to meet the general education philosophy and framework by completing at least one general education course in writing, humanities, social science, mathematics, upper-division sociology, and one course with a lab in natural and physical sciences.

Health Sciences: General Health Science Concentration, Bachelor of Science

Graduates of the General Health Science coursework are prepared for health science related professional positions. This concentration is an excellent selection for students preparing for work in careers in clinics, academic institutions, laboratories, government and community and private agencies as well as advanced study in fields such as nursing, occupational therapy, physical therapy, allied health, behavioral health and health navigation among others.

Student Learning Outcomes

1. Summarize and synthesize information relevant to assessing and improving healthcare and population health;
2. Exhibit the ability to read and interpret scientific research with application of the scientific methods, statistics, study design, and reporting in the health sciences;

3. Evaluate and integrate critical concepts and skills acquired in the health sciences curriculum to common professional problems in the fields of interest;
4. Exhibit effective oral and written communication as well as mass communication regarding subjects related to the health sciences in an individual and group setting;
5. Apply and demonstrate knowledge, skills and critical problem solving in a field-based and/or clinical setting.

Specific Program Requirements

Course	Title	Credits
Required Courses		
HS 101	Introduction to Health Professions	2
CIS 103	Introduction to PowerPoint	1
CIS 104	Introduction to Excel Spreadsheets	1
BIOL 220	Medical Terminology	2
CHEM 111	Principles of Chemistry (GT-SC2) Students interested in PT, Pre-Med, Dental etc. should take CHEM 121 with lab	3
CHEM 111L	Principles of Chemistry Lab (GT-SC1)	1
HS 230	Foundations of Public Health	3
HS 330	Epidemiology & Disease Prevention	3
HS 493	Seminar	2
HS 498	Internship	6
Choose from the below: 26 credits must be upper division courses		**41**
ANTH 100	Cultural Anthropology (GT-SS3)	3
or SOC 101	Introduction to Sociology (GT-SS3)	
BIOL 112	Nutrition	3
CHEM 122	General Chemistry II (GT-SC2)	4
CHEM 122L	General Chemistry Lab II (GT-SC1)	1
EPER 162	Personal Health	3
EPER 162L	Personal Health Lab	1
BIOL 181	College Biology I/Organismal Bio (GT-SC2)	3
BIOL 181L	College Biology I/Organismal Bio Lab (GT-SC1)	1
ACCT 201	Principles of Financial Accounting	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
EPER 201	Drugs and Healthy Lifestyles	3
BIOL 206	Introduction to Microbiology	3
BIOL 206L	Introduction to Microbiology Lab	1
EPER 212	Sports Nutrition	3
EPER 222	Behavior Facilitation	3
AT 232	First Aid	2
AT 234	Emergency Care	2
AT 260	Injury/Illness Care and Prevention	3
AT 301	Physical Assessment	3
CHEM 301	Organic Chemistry I	3
CHEM 301L	Organic Chemistry Lab I	2
CHEM 302	Organic Chemistry II	3
CHEM 302L	Organic Chemistry Lab II	2
HS 312	Nutrition & Food Systems in Public Health	3
SOC 315	Health, Culture, and Society	3
HS 320	Evaluation of Health Issues	3
HS 322	Health Coaching Concepts	3
AT 323	Functional Exercise Training	2
HS 325	Health Communication	3
HS 335	Public Health and the Environment	3
HS 336	Community and Global Health	3
EPER 343	Research and Statistics	3
EPER 344	Exercise Physiology	3
EPER 344L	Exercise Physiology Lab	1
PSYC 362	Abnormal Psychology	3
EPER 364	Kinesiology	3
HS 402	Grant Writing & Community Partnerships	3
HS 422	Applied Health Coaching	3
HS 430	Public Health Program Planning	3
EPER 432	Applied Sport & Exercise Psychology	3
HS 435	Public Health Program Evaluation	3
EPER 436	Exercise Assessment & Prescription	3
EPER 440	Biomechanics	3
EPER 461	Managing Events & Programs	3
HS 491	Special Topics	1-6
HS 492	Research	1-6
HS 494	Field Experience	1-12
HS 495	Independent Study	1-6
Other Required Courses		
BIOL 223	Human Physiology and Anatomy I (GT-SC2)	3
BIOL 223L	Human Physiology and Anatomy I Lab (GT-SC1)	1
BIOL 224	Human Physiology and Anatomy II (GT-SC2)	3
BIOL 224L	Human Physiology and Anatomy II Lab (GT-SC1)	1
CID 103	Speaking & Listening	3
MATH 156	Introduction to Statistics (GT-MA1)	3
PSYC 151	Human Development (GT-SS3)	3
General Education: English		6
General Education: History		3
General Education: Humanities		6
General Education: Social Science		3
Electives or Minor Students must have at least 40 upper-division credits. 37 credits in the major are upper-division		20
Total Credits		**120**

All HSHM Majors are required to:

- Complete a concentration of study with a cumulative GPA of 2.50 or higher.
- Earn a 2.0 overall GPA to enroll in 300 or 400-level courses in the department;
- Earn a minimum grade of a “C” in all prerequisite and major courses;
- Repeat prerequisite and major courses with a grade of “D” or lower until a grade of “C” or higher is achieved; and
- Earn a cumulative GPA of 2.0 or higher in required English and speech communication courses.
- Earn at least 120 credit hours with at least 40 upper-division credits.
- Successfully complete an internship course.
- Submit a graduation contract by the deadline the semester of graduation.

Health Sciences: Health Coaching Concentration, Bachelor of Science

Graduates from the Health Coaching concentration are prepared to work in worksite health promotion programs, insurance disease prevention programs, behavioral health facilities, or in private practice as a health coach assisting clients with behavior change and disease prevention. This is an ideal program for students who would like to assist clients with lifestyle changes and for those who may be interested in a Master's in Behavior Change, Health Promotion or Counseling.

The BS in Health Science Student Learning Outcomes are as follows:

1. Summarize and synthesize information relevant to assessing and improving population health and healthcare issues;
2. Exhibit the ability to read and interpret scientific research with application of the scientific methods, statistics, study design, and reporting in the health sciences;
3. Evaluate and integrate critical concepts and skills acquired in the health sciences curriculum to common professional problems in the health science fields of interest;
4. Exhibit effective oral and written communication as well as mass communication regarding subjects related to the health sciences in an individual and group setting;
5. Apply and demonstrate knowledge, skills and critical problems solving in a field-based and/or clinical setting;

Specific Program Requirements

Course	Title	Credits
BIOL 112	Nutrition	3
BIOL 220	Medical Terminology	2
CIS 103	Introduction to PowerPoint	1
CIS 104	Introduction to Excel Spreadsheets	1
CHEM 111	Principles of Chemistry (GT-SC2)	3
CHEM 111L	Principles of Chemistry Lab (GT-SC1)	1
EPER 162	Personal Health	3
EPER 162L	Personal Health Lab	1
EPER 201	Drugs and Healthy Lifestyles	3
EPER 222	Behavior Facilitation	3
HS 101	Introduction to Health Professions	2
HS 230	Foundations of Public Health	3
HS 312	Nutrition & Food Systems in Public Health	3
HS 322	Health Coaching Concepts	3
HS 330	Epidemiology & Disease Prevention	3
HS 422	Applied Health Coaching	3
HS 493	Seminar	2
HS 498	Internship	6
PSYC 212	Psychology of Diversity	3
PSYC 362	Abnormal Psychology	3
PSYC 405	Positive Psychology	3
PSYC 471	Clinical Psychology	3
Total Credits		**58**

HS Coaching Electives

Course	Title	Credits
Choose 3 classes for a total of 9 credits:		**9**
PSYC 311	Theories Of Personality	3
SOC 315	Health, Culture, and Society	3
HS 320	Evaluation of Health Issues	3
HS 336	Community and Global Health	3
EPER 344	Exercise Physiology	3
EPER 344L	Exercise Physiology Lab	1
EPER 364	Kinesiology	3
HS 402	Grant Writing & Community Partnerships	3
PSYC 403	Emotional Intelligence	3
SOC 404	Poverty and Inequality in the U.S.	3
HS 430	Public Health Program Planning	3
HS 435	Public Health Program Evaluation	3
EPER 436	Exercise Assessment & Prescription	3
EPER 432	Applied Sport & Exercise Psychology	3
PSYC 465	Behavior Modification	3

Specific General Education Requirements

Course	Title	Credits
BIOL 223	Human Physiology and Anatomy I (GT-SC2)	3
BIOL 223L	Human Physiology and Anatomy I Lab (GT-SC1)	1
BIOL 224	Human Physiology and Anatomy II (GT-SC2)	3
BIOL 224L	Human Physiology and Anatomy II Lab (GT-SC1)	1
CID 103	Speaking & Listening	3
ENG 101	Rhetoric & Writing I (GT-CO1)	3
MATH 156	Introduction to Statistics (GT-MA1)	3
PSYC 151	Human Development (GT-SS3)	3
SOC 101	Introduction to Sociology (GT-SS3)	3
General Education English		3
General Education History		3
General Education Humanities		6
Electives or Minor		18
Total Program Credits		**120**

All HSHM Majors are required to:

- Complete a concentration of study with a cumulative GPA of 2.50 or higher.
- Earn a 2.0 overall GPA to enroll in 300 or 400-level courses in the department;
- Earn a minimum grade of a “C” in all prerequisite and major courses;
- Repeat prerequisite and major courses with a grade of “D” or lower until a grade of “C” or higher is achieved; and
- Earn a cumulative GPA of 2.0 or higher in required English and speech communication courses.
- Earn at least 120 credit hours with at least 40 upper-division credits.
- Successfully complete an internship course.
- Submit a graduation contract by the deadline the semester of graduation.

Health Sciences: Pre-Accelerated Nursing Concentration, Bachelor of Science

Graduates of the Health Science Pre-Accelerated Nursing coursework are prepared to be admitted into the Bachelor of Science in Nursing accelerated program at CSU Pueblo if they meet the appropriate GPA requirements. They are also prepared for general health science related professional positions. This concentration is an excellent selection for students preparing for the accelerated nursing program or work in careers in clinics, academic institutions, laboratories, government and community and private agencies as well as advanced study in fields such as nursing, occupational therapy, physical therapy, allied health, behavioral health and health navigation among others.

Student Learning Outcomes

1. Summarize and synthesize information relevant to assessing and improving healthcare and population health;
2. Exhibit the ability to read and interpret scientific research with application of the scientific methods, statistics, study design, and reporting in the health sciences;
3. Evaluate and integrate critical concepts and skills acquired in the health sciences curriculum to common professional problems in the fields of interest;
4. Exhibit effective oral and written communication as well as mass communication regarding subjects related to the health sciences in an individual and group setting;
5. Apply and demonstrate knowledge, skills and critical problem solving in a field-based and/or clinical setting.

Specific Program Requirements

Specific Core Requirements

Course	Title	Credits
HS 101	Introduction to Health Professions	2
CHEM 111 & 111L	Principles of Chemistry (GT-SC2) and Principles of Chemistry Lab (GT-SC1) [1]	4
NSG 207	Nursing Pathophysiology	3
BIOL 220	Medical Terminology	2
Total Credits		**11**

[1] Students interested in Physical Therapy, Physician Assistant or Occupational Therapy should take CHEM 121 General Chemistry I (GT-SC2) (4 c.h.) & CHEM 121L General Chemistry Lab I (GT-SC1) (1 c.h.).

Specific Concentration Requirements

Course	Title	Credits
Required Concentration Courses		
BIOL 206	Introduction to Microbiology	3
BIOL 206L	Introduction to Microbiology Lab	1
CIS 103	Introduction to PowerPoint	1
CIS 104	Introduction to Excel Spreadsheets	1
HS 330	Epidemiology & Disease Prevention	3
HS 493	Seminar	2
HS 498	Internship	6
Choose from the below: [26 credits must be upper division courses]		**37**
ANTH 100 or SOC 101	Cultural Anthropology (GT-SS3) Introduction to Sociology (GT-SS3)	3
BIOL 112	Nutrition	3
EPER 162	Personal Health	3
EPER 162L	Personal Health Lab	1
EPER 201	Drugs and Healthy Lifestyles	3
EPER 212	Sports Nutrition	3
EPER 222	Behavior Facilitation	3
HS 230	Foundations of Public Health	3
NSG 231	Concepts for Professional Nursing	2
AT 232	First Aid	2
AT 234	Emergency Care	2
AT 260	Injury/Illness Care and Prevention	3
AT 301	Physical Assessment	3
NSG 302	Health Promotion and Assessment	2
NSG 302L	Health Promotion and Assessment Lab	1
NSG 308	Pharmacology in Nursing Practice	3
HS 312	Nutrition & Food Systems in Public Health	3
SOC 315	Health, Culture, and Society	3
HS 320	Evaluation of Health Issues	3
HS 322	Health Coaching Concepts	3
AT 323	Functional Exercise Training	2
HS 325	Health Communication	3
NSG 331	HEALTHY AGING	2
HS 335	Public Health and the Environment	3
HS 336	Community and Global Health	3
EPER 343	Research and Statistics	3
NSG 351	Evidence Based Nursing Practice	3
PSYC 362	Abnormal Psychology	3
NSG 371	Healthcare Informatics	2
HS 402	Grant Writing & Community Partnerships	3
HS 422	Applied Health Coaching	3
HS 430	Public Health Program Planning	3
HS 435	Public Health Program Evaluation	3
EPER 436	Exercise Assessment & Prescription	3
EPER 461	Managing Events & Programs	3
HS 491	Special Topics	1-6
HS 492	Research	1-6
EPER 494	Field Experience	1-6
HS 495	Independent Study	1-6
Other Required Courses		
BIOL 223	Human Physiology and Anatomy I (GT-SC2)	3
BIOL 223L	Human Physiology and Anatomy I Lab (GT-SC1)	1
BIOL 224	Human Physiology and Anatomy II (GT-SC2)	3
BIOL 224L	Human Physiology and Anatomy II Lab (GT-SC1)	1
CID 103	Speaking & Listening	3
MATH 156	Introduction to Statistics (GT-MA1)	3
PSYC 151	Human Development (GT-SS3)	3
General Education: English		6
General Education: History		3
General Education: Humanities		6

General Education: Social Science	3
Electives or Minor Students must have at least 40 upper-division credits. 37 credits in the major are upper-division	20
Total Credits	120

Specific Graduation Requirements

All HSHM Majors are required to:

- Complete a concentration of study with a cumulative GPA of 2.50 or higher.
- Earn a 2.0 overall GPA to enroll in 300 or 400-level courses in the department;
- Earn a minimum grade of a "C" in all prerequisite and major courses;
- Repeat prerequisite and major courses with a grade of "D" or lower until a grade of "C" or higher is achieved; and
- Earn a cumulative GPA of 2.0 or higher in required English and speech communication courses.
- Earn at least 120 credit hours with at least 40 upper-division credits.
- Successfully complete an internship or field experience course.
- Submit a graduation contract by the deadline the semester of graduation.

Health Sciences: Pre-Athletic Training Concentration, Bachelor of Science

Athletic trainers (ATs) are highly qualified, multi-skilled health care professionals who render service or treatment, under the direction of or in collaboration with a physician, in accordance with their education, training and the state's statutes, rules and regulations. As a part of the health care team, services provided by athletic trainers include primary care, injury and illness prevention, wellness promotion and education, emergent care, examination and clinical diagnosis, therapeutic intervention and rehabilitation of injuries and medical conditions. In order to seek certification, a Master's degree in Athletic Training must be completed.

This 4 year program is intended for the students planning to complete the MS in Athletic Training 2 year Master's Program or who are not accepted into the MS in Athletic Training 3+2 Program. Graduates of the Pre-Athletic Training concentration are prepared for entry into the CSU Pueblo Master level Athletic Training Programs as well as other exercise science related positions.

Accreditation

The Masters in Athletic Training Program At Colorado State University Pueblo located in Pueblo, Colorado is accredited by the:

Commission on Accreditation of Athletic Training Education (CAATE)

2001 K Street NW, 3rd Floor

Washington, DC 20006

844 462-2283

Website: https://caate.net/program-info/697/

Initial Accreditation awarded: 03-02-2022

Students who are interested in becoming a Certified and Licensed Athletic Trainer will begin their degree in the BS in Health Science Pre-Athletic Training concentration. In the Junior Year Pre-AT students can apply to the 3+2 Athletic Training Program which will result in a BS degree in Health Science and an MS degree in Athletic Training after completing 3 years (90 credit hours) of undergraduate work and 2 years (60 credit hours) of graduate work. Students must meet the requirements of both degrees (BS in Health Science Pre-AT and MS in Athletic Training). Students who decide not to apply to the 3+2 program can graduate with a BS in Health Science with 120 credits of undergraduate course work and will be eligible to apply to the 2 year MS in Athletic Training after finishing a bachelor's degree and all prerequisites.

Students in the Pre-Athletic Training 3+2 Program should apply in the spring of the junior year of the Health Science Pre-Athletic Training major. Deadline for first consideration is January 15 and final deadline is April 15. Cohort begin in mid-May and the program is year round for two years. Please contact the program director, Dr. Mary Placzkowski at mary.placzkowski@csupueblo.edu for any questions concerning admission.

The BS in Health Science Student Learning Outcomes are as follows:

1. Summarize and synthesize information relevant to assessing and improving population health and healthcare issues;
2. Exhibit the ability to read and interpret scientific research with application of the scientific methods, statistics, study design, and reporting in the health sciences;
3. Evaluate and integrate critical concepts and skills acquired in the health sciences curriculum to common professional problems in the health science fields of interest;
4. Exhibit effective oral and written communication as well as mass communication regarding subjects related to the health sciences in an individual and group setting;
5. Apply and demonstrate knowledge, skills and critical problems solving in a field-based and/or clinical setting;

Specific Program Requirements

Specific Concentration Requirements

Course	Title	Credits
Required Concentration Courses		
HS 101	Introduction to Health Professions	2
CHEM 111	Principles of Chemistry (GT-SC2)	3
CHEM 111L	Principles of Chemistry Lab (GT-SC1)	1
EPER 162	Personal Health	3
EPER 162L	Personal Health Lab	1
EPER 201	Drugs and Healthy Lifestyles	3
BIOL 220	Medical Terminology	2
EPER 222	Behavior Facilitation	3
AT 232	First Aid	2
AT 234	Emergency Care	2
AT 260	Injury/Illness Care and Prevention	3
AT 301	Physical Assessment	3
EPER 320	NSCA Test Preparation	3
HS 330	Epidemiology & Disease Prevention	3
AT 323	Functional Exercise Training	2
EPER 343	Research and Statistics	3

EPER 344	Exercise Physiology	3
EPER 344L	Exercise Physiology Lab	1
EPER 364	Kinesiology	3
EPER 432	Applied Sport & Exercise Psychology	3
EPER 436	Exercise Assessment & Prescription	3
EPER 440	Biomechanics	3
EPER 461	Managing Events & Programs	3
HS 493	Seminar	2
HS 498	Internship	6
Outside the Major		
Pick one: either BIOL 100 & 100L or BIOL 206 & 206L		4
BIOL 100 & 100L	Principles of Biology (GT-SC2) and Principles of Biology Lab (GT-SC1)	4
BIOL 206 & 206L	Introduction to Microbiology and Introduction to Microbiology Lab	4
PHYS 201	Principles of Physics I (GT-SC2)	3
PHYS 201L	Principles of Physics Lab I (GT-SC1)	1
Electives		
Elective hours		4
Other Required Courses		
CIS 104	Introduction to Excel Spreadsheets	1
BIOL 112	Nutrition	3
PSYC 205	Introduction to Sport Psychology	3
CID 103	Speaking & Listening	3
PSYC 151	Human Development (GT-SS3)	3
BIOL 223	Human Physiology and Anatomy I (GT-SC2)	3
BIOL 223L	Human Physiology and Anatomy I Lab (GT-SC1)	1
BIOL 224	Human Physiology and Anatomy II (GT-SC2)	3
BIOL 224L	Human Physiology and Anatomy II Lab (GT-SC1)	1
Take either MATH 120 or MATH 156. Must have at least a 24 ACT or 580 SAT in math to take MATH 156. See footnote.		3
MATH 120	College Algebra (GT-MA1)	3
MATH 156	Introduction to Statistics (GT-MA1)	3
General Education: English		6
General Education: History		3
General Education: Humanities		6
General Education: Social Science		3
Total Credits		**120**

[1] Students planning to pursue a doctorate in physical therapy should take CHEM 121 General Chemistry I (GT-SC2) (4 c.h.) & CHEM 121L General Chemistry Lab I (GT-SC1) (1 c.h.) instead of CHEM 111 & 111L.

[2] Students are required to complete college algebra or pre-calculus algebra level math or have a math score of ACT 24 or SAT 580 to enroll in PHYS 201. Students who do not have this placement score must take MATH 120.

All HSHM Majors are required to:

- Complete a concentration of study with a cumulative GPA of 2.50 or higher.
- Earn a 2.0 overall GPA to enroll in 300 or 400 level courses in the department;
- Earn a minimum grade of a "C" in all prerequisite and major courses;
- Repeat prerequisite and major courses with a grade of "D" or lower until a grade of "C" or higher is achieved; and
- Earn a cumulative GPA of 2.0 or higher in required English and speech communication courses.
- Earn at least 120 credit hours with at least 40 upper division credits.
- Successfully complete an internship or field experience course.
- Submit a graduation contract by the deadline the semester of graduation.

Health Sciences: Pre-Nursing Concentration

All pre-nursing students will be Health Sciences majors with a pre-nursing concentration. Admission to the University does not imply acceptance to the nursing program. Applicants are ranked based on their GPA for the general education and prerequisites required by the program combined with points from a holistic admissions process. Fifty percent of the prerequisites and general education courses must be completed by the application deadline. Special consideration will be given to students completing all of their prerequisite and general education coursework at CSU Pueblo, veteran status, first generation students, and residency in Southeastern Colorado. Only students admitted to the Nursing or Health Sciences majors are eligible to take nursing courses as indicated in their degree plan

The BSN program is very competitive. If a student is not admitted to the BSN program they can complete the BS in Health Science which will prepare them for the accelerated Nursing Program, and entry level Master in Nursing and other health related graduate degrees at other institutions such as Public Health, Nutrition, Physical Therapy, Occupational Therapy, and Healthcare Administration.

Specific Admission Requirements

Undergraduate Admission Policies & Procedures

Students are responsible for all undergraduate admissions policies and procedures as outlined in the *Academic Policies* section of this catalog.

Undergraduate Admission Requirements

There are two ways to apply for admission to the Nursing Program.

Admission as a High School Senior to Nursing Program as a Freshman

Slots for admission as a freshman are limited. Admission is not guaranteed as students with the highest GPA's and ACT/SAT scores will have priority selection. Preference is given to students graduating from Southern Colorado high schools and/or Health Academy programs. In order to be admitted directly in to the program as a freshman, students must:

- Demonstrate proof of high school diploma. Students must show proof of 3 years of science, including biology and chemistry and proof of algebra or equivalent.
- Have a cumulative high school GPA of 3.25 or higher on a 4.0 scale.
- Meet required math scores for enrollment in MATH 156.
- 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 meet these requirements, they will lose their opportunity to progress directly into the nursing program.

Students denied admission as freshman are eligible to apply as second semester sophomores through the regular admissions process or through the Health Sciences route to the accelerated BSN program.

Admission as a Second Semester Sophomore from CSU Pueblo or Transfer from an Accredited School

All pre-nursing students will be Health Sciences majors with a pre-nursing concentration. 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 combined with points from a holistic admissions process. Fifty percent of the prerequisites and general education courses must be completed by the application deadline. Special consideration will be given to students completing all of their prerequisite and general education coursework at CSU Pueblo, veteran status, first generation students, and residency in Southeastern Colorado. Only students admitted to the Nursing or Health Sciences majors are eligible to take nursing courses as indicated in their degree plan. For the basic nursing option student admission:

- Requirements are a minimum GPA of 3.00 for all required general education and prerequisites. All prerequisites must be passed with a C or better (C- is not acceptable) and be completed prior to the term of entrance into the nursing program. Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission. Prerequisite courses may be repeated one (1) time only for admission eligibility.
- All general education must be completed prior to the term of entrance into the nursing program.
- The student needs to be admitted to CSU Pueblo first, and then submit a separate application to the nursing program the year prior to the spring (basic) or summer (accelerated) term they plan to start the program. During the pre-nursing phase of the application process, students will be advised by the pre-nursing advisor.

Students will be notified via email 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 who are residents of another country 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 Basic Admission | Admissions | CSU Pueblo (https://www.csupueblo.edu/nursing-bs/admissions/basic-admission.html) or in the nursing department. The completed applications must be submitted to the School of Nursing by the scheduled deadline. Incomplete applications will not be processed. Applicants should contact the School of Nursing with questions regarding applications.

Undergraduate Post Acceptance Requirements

Before a student starts the nursing program they must attend a mandatory orientation.

The following must be submitted through the nursing tracking system after receiving a Net ID number from the University and instructions from the Department of Nursing prior to orientation. Failure to do so by the stated deadline will result in loss of admission status.

- Background check per Colorado Law. (House bill 97-1084).
- A urine drug screen.
- Current certification in CPR from the American Heart Association with BLS.
- Current physical examination within the last year and current immunizations including, hepatitis B series, TB test or two step if necessary, measles, mumps, rubella, influenza, covid-19, tetanus and varicella and/or titers.
- Proof of current health insurance.
- Proof of current nursing student malpractice insurance from organization specified by School of Nursing.

The following must be submitted to the School of Nursing prior to orientation by the stated deadline:

- Current unofficial transcripts showing completion of all prerequisite and general education classes.
- Return receipt for program acceptance.

In order to register for undergraduate nursing courses, students must have unconditional acceptance into the nursing program and follow their option degree plan, or register by permission of the nursing undergraduate program director.

Degree Plus to Bachelor of Science in Nursing Accelerated (BSN) Option

Students will be notified by email of their admission status to the program. Students who are accepted to the program should acknowledge acceptance by return email.

The degree-plus student is expected to meet with the pre-nursing advisor for advisement and plan development. The student must have a cumulative nursing prerequisite GPA of 3.0 and follow all admission and post acceptance requirements set forth in the Basic Nursing Option. Due to the intensity of the curriculum, it is advised that the student not work and be able to attend to their studies full-time. Students must maintain a cumulative nursing 3.00 GPA to progress.

Admission to this option is very competitive and applicants are ranked based on their prerequisite GPA combined with points from a holistic admissions process. Special consideration will be given to students completing their prior degree at CSU-Pueblo, veteran status, first generation students, and residency in Southeastern Colorado.

Time Limits

For applicants to all options (except registered nurses), Anatomy & Physiology I & II, Intro to Human Development, and Pathophysiology completed (5) years or more before applying to the nursing program will not be accepted as satisfying the prerequisite requirement.

Applications for the Basic Admission Pathway in School of Nursing are due before May 25th of the year preceding January admission.

For more information contact:

Colorado State University Pueblo

School of Nursing

Attn: Peggy Foley

Advisor/Counselor of Nursing

2200 Bonforte Blvd

Pueblo, CO 81001

peggy.foley@csupueblo.edu

Student Learning Outcomes

1. Summarize and synthesize information relevant to assessing and improving population health and healthcare issues;
2. Exhibit the ability to read and interpret scientific research with application of the scientific methods, statistics, study design, and reporting in the health sciences;
3. Evaluate and integrate critical concepts and skills acquired in the health sciences curriculum to common professional problems in the health science fields of interest;
4. Exhibit effective oral and written communication as well as mass communication regarding subjects related to the health sciences in an individual and group setting;
5. Apply and demonstrate knowledge, skills and critical problem solving in a field-based and/or clinical setting;
6. Successfully enter into a health science related career or into a graduate program;

Students in the Pre-Nursing concentration will apply to the BSN in the spring of the Freshman Year. If they are not admitted into the Basic Admission Pathway they can change their major to Health Science (Pre-Accelerated Nursing) and pursue the Accelerated Admission Pathway. Students must complete the BS in Health Science and the Accelerated prerequisite courses with at least a 3.0 GPA for preferred admission into the accelerated BSN program. Students can earn up to 15 credits of nursing classes that will count for both the BS in Health Science and the BSN while completing the BS in HS if the student scores at least a B in the course. Please see the BS in HS Pre-Accelerated Nursing curriculum for the courses.

Specific Program Requirements

Specific Core Requirements

Course	Title	Credits
HS 101	Introduction to Health Professions	2
CHEM 111 & 111L	Principles of Chemistry (GT-SC2) and Principles of Chemistry Lab (GT-SC1) [1]	4
NSG 207	Nursing Pathophysiology	3
BIOL 220	Medical Terminology	2

[1] Students interested in Physical Therapy, Physician Assistant or Occupational Therapy should take CHEM 121 General Chemistry I (GT-SC2) (4 c.h.) & CHEM 121L General Chemistry Lab I (GT-SC1) (1 c.h.)

Specific Concentration Requirements

Course	Title	Credits
HS 101	Introduction to Health Professions [1]	2
CHEM 111	Principles of Chemistry (GT-SC2) [2]	3
CHEM 111L	Principles of Chemistry Lab (GT-SC1) [2]	1
BIOL 206	Introduction to Microbiology	3
BIOL 206L	Introduction to Microbiology Lab	1
NSG 207	Nursing Pathophysiology	3
Total Credits		**13**

[1] HS 101 not required but highly recommended for entry into the BSN program.

[2] CHEM 121 and CHEM 121L will be accepted for CHEM 111 and CHEM 111L

Note: HS 101 is not required but highly recommended for entry into the BSN program.

Specific General Education Requirements

Course	Title	Credits
Required General Education Courses		
BIOL 223	Human Physiology and Anatomy I (GT-SC2)	3
BIOL 223L	Human Physiology and Anatomy I Lab (GT-SC1)	1
BIOL 224	Human Physiology and Anatomy II (GT-SC2)	3
BIOL 224L	Human Physiology and Anatomy II Lab (GT-SC1)	1
CID 103	Speaking & Listening	3
MATH 156	Introduction to Statistics (GT-MA1)	3
PSYC 151	Human Development (GT-SS3)	3
General Education: World Language		3
General Education: English		6
General Education: History		3
General Education: Humanities		3
General Education: Social Science		3
Total Credits		**35**

[1] CID 221 will be accepted in lieu of CID 103 but student must complete additional Gen Ed Humanities

Total credit hours before applying to the BSN Program: 46

Students cannot graduate from the Pre-Nursing concentration. Students will apply to the Basic Pathway for the Bachelor of Science in Nursing during the Spring semester of their Freshman year. The Basic Admission Pathway is for students that have completed at least 23 credits (fifty percent) of prerequisite nursing coursework.

If a student is not admitted into the Basic Admission Pathway they can change their major to Health Science (Pre-Accelerated Nursing) and pursue the Accelerated Admission Pathway. Students must complete the BS in Health Science and the Accelerated prerequisites with at least a 3.0 GPA for preferred admission into the accelerated BSN program. Students can earn up to 15 credits of nursing classes that will count for both the BS in Health Science and the BSN while completing the BS in HS as long as the student earns at least a B in the courses. Please see the BS in HS Pre-Accelerated Nursing curriculum for the courses.

Health Sciences: Public Health Concentration, Bachelor of Science

Public Health is a field of science that aims to prevent disease, prolong life and promotion overall wellbeing. Public Health involves education, promotion of healthy lifestyles, research, prevention, and the detection and response of disease or conditions in individuals, organizations and communities. The concept of health takes into account physical, psychological, spiritual and social well-being.

Graduates of the Public Health concentration are eligible to sit for the Certification in Public Health Exam.

Public Health graduates can find employment in worksite health promotion, community health, government and volunteer health agencies, clinical and managed care settings. Public Health graduates will be prepared to apply for a Master in Public Health degree.

Student Learning Outcomes

- Summarize and synthesize information relevant to assessing and improving healthcare and population health;
- Exhibit the ability to read and interpret scientific research with application of the scientific methods, statistics, study design, and reporting in the health sciences;
- Evaluate and integrate critical concepts and skills acquired in the health sciences curriculum to common professional problems in the fields of interest;
- Exhibit effective oral and written communication as well as mass communication regarding subjects related to the health sciences in an individual and group setting;
- Apply and demonstrate knowledge, skills and critical problem solving in a field-based and/or clinical setting.

Specific Program Requirements

Course	Title	Credits
Required Courses		
HS 101	Introduction to Health Professions	2
ANTH 100	Cultural Anthropology (GT-SS3)	3
or SOC 101	Introduction to Sociology (GT-SS3)	
CHEM 111	Principles of Chemistry (GT-SC2)	3
CHEM 111L	Principles of Chemistry Lab (GT-SC1)	1
BIOL 112	Nutrition	3
EPER 162	Personal Health	3
EPER 162L	Personal Health Lab	1
BIOL 220	Medical Terminology	2
EPER 222	Behavior Facilitation	3
HS 230	Foundations of Public Health	3
AT 232	First Aid	2
HS 312	Nutrition & Food Systems in Public Health	3
HS 320	Evaluation of Health Issues	3
HS 325	Health Communication	3
HS 330	Epidemiology & Disease Prevention	3
HS 335	Public Health and the Environment	3
HS 336	Community and Global Health	3
EPER 343	Research and Statistics	3
HS 402	Grant Writing & Community Partnerships	3
HS 430	Public Health Program Planning	3
HS 435	Public Health Program Evaluation	3
HS 493	Seminar	2
HS 498	Internship	6
Other Required Courses		
BIOL 223	Human Physiology and Anatomy I (GT-SC2)	3
BIOL 223L	Human Physiology and Anatomy I Lab (GT-SC1)	1
BIOL 224	Human Physiology and Anatomy II (GT-SC2)	3
BIOL 224L	Human Physiology and Anatomy II Lab (GT-SC1)	1
CIS 103	Introduction to PowerPoint	1
CIS 104	Introduction to Excel Spreadsheets	1
CID 103	Speaking & Listening	3
MATH 156	Introduction to Statistics (GT-MA1)	3
PSYC 151	Human Development (GT-SS3)	3
POLS 101	American Government (GT-SS1)	3
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
World Language Humanities		3
General Education Humanities		3
General Education History		3
Electives or Minor		19
Total Credits		**120**

All HSHM Majors are required to:

- Complete a concentration of study with a cumulative GPA of 2.50 or higher.
- Earn a 2.0 overall GPA to enroll in 300 or 400-level courses in the department;
- Earn a minimum grade of a “C” in all prerequisite and major courses;
- Repeat prerequisite and major courses with a grade of “D” or lower until a grade of “C” or higher is achieved; and
- Earn a cumulative GPA of 2.0 or higher in required English and speech communication courses.
- Earn at least 120 credit hours with at least 40 upper-division credits.
- Successfully complete an internship course.
- Submit a graduation contract by the deadline the semester of graduation.

Outdoor Recreation, Minor

The Outdoor Recreation minor is for students who want to teach adventure education, outdoor skills, and lead trips within the educational or corporate settings.

Specific Program Requirements

Course	Title	Credits
EPER 249	Challenge Course Leadership	2
EPER 270	Outdoor Leadership I	2
EPER 322	Wilderness First Aid	2
EPER 360	Outdoor Education	3
EPER 484	Outdoor Resources & Management	3
Select one of the following:		**2**
EPER 102	Mountain Orientation	2
EPER 103	Winter Orientation	2
EPER 104	Desert Orientation	2
EPER 105	Canyon Orientation	2
Select 6 credits from the following:		6
EPER 112L	Rock Climbing	1
EPER 113L	Whitewater Boating	1
EPER 114L	Basic Mountaineering Techniques	1
EPER 116L	Camping	1
EPER 117L	Backpacking	1
EPER 118L	Fly Fishing	1

EPER 120L	Introduction to Search and Rescue	1
EPER 125L	Snow Sports	1
EPER 176L	Life Guard Training	2
EPER 205L	Snow Sports II	1
EPER 276L	Water Safety Instructor Certification	2
EPER 350	Leadership & Ethics	3
EPER 549	Facilitation of Adventure Education	3
Total Credits		**20**

[1] Students pursuing the WEA Outdoor Leadership Certification must enroll in EPER 102 Mountain Orientation (2 c.h.) and complete additional leading experiences as per the certification requirements.

Public Health, Minor

The public health minor is available to students who are interested in working in disease prevention, community and public health settings. It is ideal for students majoring in EXPER, business, mass communications, psychology, sociology, social work and math.

Specific Program Requirements

Course	Title	Credits
HS 101	Introduction to Health Professions	2
HS 230	Foundations of Public Health	3
HS 330	Epidemiology & Disease Prevention	3
HS 430	Public Health Program Planning	3
HS 435	Public Health Program Evaluation	3
Select 6 credit hours from the following:		**6**
HS 320	Evaluation of Health Issues	3
HS 312	Nutrition & Food Systems in Public Health	3
HS 402	Grant Writing & Community Partnerships	3
HS 335	Public Health and the Environment	3
HS 336	Community and Global Health	3
HS 492	Research	1-3
HS 494	Field Experience	1-3
Total Credits		**20**

Recreation Leadership, Certificate

The School of Health Sciences & Human Movement offers a certificate in recreation leadership that will prepare students to assist recreation professionals, to lead programs and excursions in the outdoors, and will act as a precursor to the BS degree in EXPER with a concentration in recreation.

Specific Program Requirements

Course	Title	Credits
EPER 162 & 162L	Personal Health and Personal Health Lab	4
EPER 240	Recreation Program Design	3
EPER 270	Outdoor Leadership I	2
EPER 322	Wilderness First Aid	2
Select five credits from the following:		**5**
EPER 102	Mountain Orientation	2
EPER 103	Winter Orientation	2
EPER 104	Desert Orientation	2
EPER 105	Canyon Orientation	2
EPER 112L	Rock Climbing	1
EPER 113L	Whitewater Boating	1
EPER 114L	Basic Mountaineering Techniques	1
EPER 116L	Camping	1
EPER 117L	Backpacking	1
EPER 118L	Fly Fishing	1
EPER 120L	Introduction to Search and Rescue	1
EPER 249	Challenge Course Leadership	2
EPER 494	Field Experience	1
Total Credits		**16**

Recreation, Minor

The recreation (REC) minor is available to all non-EXPER Recreation majors. The minor is ideal for those majoring in health sciences, social work, sociology, and biology as well as for students aspiring to teach in public/private schools.

Specific Program Requirements

Available to Non-REC Majors Only

Course	Title	Credits
EPER 162 & 162L	Personal Health and Personal Health Lab	4
EPER 240	Recreation Program Design	3
Complete four credits from the following:		**4**
EPER 102	Mountain Orientation	2
EPER 103	Winter Orientation	2
EPER 104	Desert Orientation	2
EPER 105	Canyon Orientation	2
EPER 112L	Rock Climbing	1
EPER 113L	Whitewater Boating	1
EPER 114L	Basic Mountaineering Techniques	1
EPER 116L	Camping	1
EPER 117L	Backpacking	1
EPER 118L	Fly Fishing	1
EPER 120L	Introduction to Search and Rescue	1
EPER 249	Challenge Course Leadership	2
Electives	**Must be EPER course. Must be 300 level or higher.**	**9**
Total Credits		**20**

Tourism, Minor

The tourism minor is open to all majors and is ideal for business, communications, health sciences or EXPER students who are interested in the expanding field of tourism.

Specific Program Requirements

Course	Title	Credits
EPER 240	Recreation Program Design	3
EPER 250	Commercial Recreation and Tourism	3
EPER 480	Business of Tourism	3

EPER 494	Field Experience	2
MGMT 318	Human Resource Management	3
MGMT 414	Entrepreneurship	3
MKTG 410	Social Media and E-Marketing	3
Total Credits		**20**

COLLEGE OF HUMANITIES, ARTS, & SOCIAL SCIENCES

Mission & Vision

Mission

The College of Humanities, Arts, and Social Sciences offers students opportunities to become ethical, socially responsible, engaged learners who are prepared to assume leadership in a dynamic global context.

Vision

The College of Humanities, Arts, and Social Sciences encourages lifelong learning and partnerships with the communities it serves. We aspire to develop individuals who contribute to enhancing a diverse, global society by offering courses and experiences that develop the aesthetic, creative, critical, and theoretical senses of our students.

The Anthony T. & Theresa H. Capps-Capozzolo Center for the Creative & Performing Arts

The Anthony T. and Theresa H. Capps-Capozzolo Center for the Creative and Performing Arts is an interdisciplinary academic unit within the College of Humanities, Arts, and Social Sciences. In accordance with the intent of Anthony Capozzolo's generous gift to the University, the center's mission is to promote and enhance the visual arts and music through academic programs, course offerings, scholarships, special events, and related activities that contribute to student learning and appreciation for the creative and performing arts at CSU Pueblo.

CHASS Tutoring, Learning, and Writing Center

The CHASS Tutoring, Learning, and Writing Center provides individual and group tutoring for general education courses in humanities, history, social sciences, and English as well as an inviting atmosphere where students can receive advice and positive feedback on any type of writing from research papers, letters, graduate school application essays, and writing assignments to poetry and fiction.

Academic Departments & Programs

Art & Creative Media Department (p. 233)

Undergraduate Programs

- Art & Creative Media, Bachelor of Arts (p. 238)
- Art & Creative Media: Art History Concentration, Bachelor of Arts (p. 240)
- Art & Creative Media: Creative Media Concentration, Bachelor of Fine Arts (p. 241)
- Art & Creative Media: K-12 Teacher Preparation Concentration, Bachelor of Arts (p. 242)
- Art & Creative Media: Studio Arts Concentration, Bachelor of Fine Arts (p. 243)

Minors

- Art & Creative Media, Minor (p. 239)

English & World Languages Department (https://catalog.csupueblo.edu/college-of-humanities-arts-and-social-sciences/english-world-languages/)

Undergraduate Programs

- English, Bachelor of Arts (p. 263)
- English: 7-12 Teacher Preparation Concentration, Bachelor of Arts (p. 265)
- English: Creative Writing Concentration, Bachelor of Arts (p. 266)
- World Languages-Spanish, Bachelor of Arts (p. 268)
- World Languages-Spanish: K-12 Teacher Preparation Concentration, Bachelor of Arts (p. 269)
- World Languages-Spanish: Media & Entertainment Concentration, Bachelor of Arts (p. 271)
- World Languages-Spanish: Translation Studies Concentration, Bachelor of Arts (p. 272)

Minors

- Creative Writing, Minor (p. 262)
- English, Minor (p. 264)
- Spanish, Minor (p. 267)

Certificates

- Advanced Spanish for the Health Professions, Certificate (p. 261)
- Basic Spanish for the Health Professions, Certificate (p. 262)

History, Political Science, Philosophy, & Geography Department (https://catalog.csupueblo.edu/college-of-humanities-arts-and-social-sciences/history-political-science-philosophy-geography/)

Undergraduate Programs

- History, Bachelor of Arts (p. 282)
- History, Bachelor of Science (p. 283)
- History: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 285)
- Political Science, Bachelor of Arts (p. 287)
- Political Science, Bachelor of Science (p. 288)
- Political Science: 7-12 Teacher Preparation Concentration, Bachelor of Arts (p. 290)
- Political Science: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 291)

Minors

- History, Minor (p. 284)
- Legal Studies, Minor (p. 286)
- Philosophy & Religious Studies, Minor (p. 286)
- Political Science, Minor (p. 289)

Certificates

- Colorado Studies, Certificate (p. 282)
- Geography, Certificate (p. 282)

Media & Entertainment Department (p. 294)

Undergraduate Programs

- Media & Entertainment: Media & Entertainment Production Concentration, Bachelor of Science (p. 301)

- Media & Entertainment: Media, Entertainment, & Arts Management Concentration, Bachelor of Science (p. 303)
- Media & Entertainment: Multimedia Journalism & Storytelling Concentration, Bachelor of Science (p. 306)
- Media & Entertainment: Sports & ESports Media Concentration, Bachelor of Science (p. 308)
- Media & Entertainment: Strategic Communication Concentration, Bachelor of Science (p. 310)

Minors
- Media & Entertainment, Minor (p. 300)

Music Department (p. 314)
Undergraduate Programs
- Music, Bachelor of Arts (p. 334)
- Music: K-12 Teacher Preparation Concentration, Bachelor of Arts (p. 337)
- Music: Music Performance Concentration, Bachelor of Arts (p. 340)

Minors
- Composition/Music Theory, Minor (p. 334)
- Jazz Studies, Minor (p. 334)
- Music, Minor (p. 337)
- Organ Performance Studies, Minor (p. 343)
- Piano Pedagogy, Minor (p. 343)

Psychology Department (p. 345)
Undergraduate Programs
- Psychology, Bachelor of Arts (p. 350)
- Psychology, Bachelor of Science (p. 351)

Minors
- Creative Wellness, Minor (p. 349)
- Psychology, Minor (p. 353)

Certificates
- Nutritional Psychology, Certificate (p. 350)

Social Work Department (p. 353)
Undergraduate Programs
- Social Work, Bachelor of Social Work (p. 358)

Graduate Programs
- Social Work, Masters of Social Work (p. 360)

Sociology, Criminology, & Anthropology Department (https://catalog.csupueblo.edu/college-of-humanities-arts-and-social-sciences/sociology-criminology-anthropology/)
Undergraduate Programs
- Criminology, Bachelor of Arts (p. 373)
- Criminology, Bachelor of Science (p. 374)
- Criminology/Sociology Double Major, Bachelor of Arts (p. 375)
- Criminology/Sociology Double Major, Bachelor of Science (p. 376)
- Criminology: Community Engagement Concentration, Bachelor of Science (p. 378)
- Sociology, Bachelor of Arts (p. 379)
- Sociology, Bachelor of Science (p. 380)
- Sociology: Community Engagement Concentration, Bachelor of Arts (p. 382)
- Sociology: Community Engagement Concentration, Bachelor of Science (p. 383)

Minors
- Anthropology, Minor (p. 372)
- Sociology, Minor (p. 381)
- Women's Studies, Minor (p. 384)

Additional Humanities, Arts, & Social Sciences Programs
Undergraduate Programs
- Gaming & Immersive Media, Bachelor of Fine Arts (p. 273)
- Gaming & Immersive Media, Bachelor of Fine Arts (p. 273)
- Humanities & Social Sciences, Bachelor of Arts (p. 293)

Minors
- Cannabis Studies, Minor (p. 244)
- Chicano/a Studies, Minor (p. 245)
- Humanities & Social Sciences, Minor (p. 293)
- Military Science, Minor (p. 312)
- Museum Studies, Minor (p. 314)
- Music, Sound, & Audio Production, Minor (p. 344)
- Non Profit Administration, Minor (p. 344)
- Veteran Studies, Minor (p. 385)

Certificates
- Creative Industry Essentials, Certificate (p. 246)
- Creative Industry Essentials, Certificate (p. 246)
- Diversity Studies, Certificate (p. 246)

Art & Creative Media Department

Department Mission

The Department of Art & Creative Media offers rigorous experience-based instruction in the practices of studio art, creative media, art history and art education. A full-time faculty of working artists and scholars along with accomplished visiting professionals are dedicated to the development of emerging creatives who enrich our society with thoughtful insight, valuable skill sets and an understanding of the responsibilities that come with visual literacy.

Creativity and critical insights are essential to any academic inquiry. As such, the Department is committed to being accessible to students from a variety of University disciplines, our vibrant Pueblo culture and the Southwest United States. Art, history and education are fundamental to a community's identity; they are a reflection of its values and are key to fostering a diverse culture of lifelong learners.

Department Goals

1. Prepare students in the practices of Studio Art, Creative Media, Art History, and Art Education toward the achievement of personal creative goals, art-related careers or further academic and professional education.

2. Provide relevant studio and laboratory opportunities within well-appointed facilities that are conducive to creative growth and the development of fundamental skills across a range of formal topics.
3. Nurture an environment that encourages professional curiosity, collaboration and respect for diverse and multiple viewpoints.
4. Provide services and experiences to a variety of University disciplines as well as local, regional and national communities, fostering a culture of lifelong learning and global citizenship.

Department Student Learning Outcomes

Outcome 1 Exploration of the Creative Process: Experiment with and adopt a variety of processes, methods, and interpretations to explore innovative solutions to creative challenges.

Outcome 2 Development of Skills & Techniques: Exhibit sufficient fluency in one or more media to craft work that meets appropriate professional standards for the scale and scope of a project. Demonstrate an ability to adapt techniques and formal methods to serve the objectives of the work.

Outcome 3 Communication of Ideas & Context: Clearly articulate visually, orally, and in writing the content and context of art historical research and creative work.

Outcome 4 Demonstrate Awareness & Intellectual Maturity: Display a willingness to question one's own perspective. Approach the creative and scholarly process with curiosity and persistence. Take initiative in working independently or collaboratively to achieve stated objectives.

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.

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.

Academic Programs

Undergraduate Programs

- Art & Creative Media, Bachelor of Arts (p. 238)
- Art & Creative Media: Art History Concentration, Bachelor of Arts (p. 240)
- Art & Creative Media: Creative Media Concentration, Bachelor of Fine Arts (p. 241)
- Art & Creative Media: K-12 Teacher Preparation Concentration, Bachelor of Arts (p. 242)
- Art & Creative Media: Studio Arts Concentration, Bachelor of Fine Arts (p. 243)

Minors

- Art & Creative Media, Minor (p. 239)

ART

ART 100 Visual Dynamics (GT-AH1) 3(3-0)
Fall, Spring, Summer.
Appreciation and understanding of visual experiences and techniques reflecting the cultural dynamics of creativity.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH1) (CC)

ART 110 Art Career Orientation 3(2-2)
As Needed.
Guided development of individual job objectives.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 115 Two-Dimensional Design 3(1-4)
As Needed.
The foundation of visual form, emphasizing two-dimensional design and color theory.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 116 Three-Dimensional Design 3(1-4)
As Needed.
The foundation of visual form, emphasizing three dimensional design.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 141 Drawing I: Observational Drawing 3(1-4)
Fall.
Development of perception and technical skills in rendering.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 176 Photography: Expressive Composition 3(2-2)
Spring.
An introduction to observational seeing through photography. The class focuses on composition within the camera frame and selecting the photographs that most effectively convey the objectives of each experiment.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 233 Sculpture I 3(1-4)
As Needed.
Basic problems in sculpture relating specific concerns of visual form and process.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

ART 234 Painting I 3(1-4)
Spring.
Introduction to painting in oil and acrylic where the control of space will be approached through the use of color.
Prerequisite: ART 115 and ART 141.
Corequisite: None.
Registration Information: Permission of instructor.

ART 242 Drawing II: Life Drawing 3(1-4)
Spring.
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.
Corequisite: None.
Registration Information: None.

ART 247 Ceramics I 3(1-4)
Fall, Spring, Summer.
Essential skills in ceramic processes; emphasis on form and function as related to students' needs and creative intent.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 270 Printmaking I 3(1-4)
As Needed.
Introduction to multiple image production utilizing relief printing including woodcut, linocut and collagraph. Introduction to shop techniques, safety procedures and history of the medium.
Prerequisite: None.
Corequisite: None.
Registration Information: Art core or permission of instructor.

ART 274 Art & Design Essentials 3(2-3)
Fall.
This course expands on the concepts of ARC 174 toward incorporating industry standard digital tool-sets into the creative process as well as exploring the dynamics of visual communication.
Prerequisite: ARC 174.
Corequisite: None.
Registration Information: None.

ART 276 Photography: Creative Lighting 3(2-3)
Fall.
Explore the fundamental characteristics of light & its effect on the photographic image. Use the 5 characteristics of light to direct every aspect of the process from basic studio sets to large scale location works.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 281 Principles of Graphic Design 3(2-3)
Spring.
Exploration of Graphic Design Theory and the Basic Principles for the effective use of color, dynamic type layout, branding & logo design as well as page & screen design.
Prerequisite: ARC 174.
Corequisite: None.
Registration Information: None.

ART 291 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ART 301 Late Twentieth-Century Aesthetics 3(3-0)
As Needed.
This course introduces the classic writings in ancient and modern philosophy theory and criticism informing American and European art of the late twentieth century.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 310 Portfolio Review 1(1-0)
As Needed.
Art majors must present a portfolio of their artwork or art history research prospectus for the art faculty to evaluate.
Prerequisite: None.
Corequisite: None.
Registration Information: Art Core.

ART 312 Medieval Art (3 V)
As Needed.
Explore the world of medieval art from ivory cosmetics cases to gargoyles. Discover the roles that art played in daily life, politics, and religion within Jewish, Christian, and Islamic contexts c. 300-1300 CE.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 314 Baroque & Rococo Art 3(3-0)
As Needed.
From Caravaggio to Chippendale, baroque and rococo art presents a feast for the senses. This course examines such topics as drama and sensuality in religious art, courtly life, depictions of the everyday, and eroticism.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 333 Sculpture II: Site Art 3(1-4)
As Needed.
Creating sculptural elements whose form and content are a response to its site and context.
Prerequisite: ART 233.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (9).

ART 334 Painting II 3(1-4)
Fall.
Techniques in oil and acrylic emphasizing the application of materials to subject matter and composition.
Prerequisite: ART 234.
Corequisite: None.
Registration Information: None.

ART 342 Drawing III 3(1-4)
Spring.
Advanced course in pursuit of increased skills of perception and artistic anatomy.
Prerequisite: ART 141 and ART 242.
Corequisite: None.
Registration Information: Repeatable (9).

ART 347 Ceramics II 3(1-4)
Fall, Spring, Summer.
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.
Corequisite: None.
Registration Information: Repeatable (9).

ART 370 Printmaking II 3(1-4)
As Needed.
Introduction to traditional and non-traditional methods of Intaglio printing including line etch, aquatint, dry point, resist methods, photo processes and color printing.
Prerequisite: ART 270.
Corequisite: None.
Registration Information: Repeatable (9).

ART 374 Motion Graphics 3(1-4)
Spring.
Students explore contemporary principles, compositing methods and industry standard software to create visual effects for video, animation and motion related projects.
Prerequisite: ART 274 or MAE 240.
Corequisite: None.
Registration Information: None.

ART 376 Photography: Digital to Darkroom 3(1-4)
As Needed.
Produce exhibition quality prints from the same historical processes that defined the very invention of photography. Experiment with 19th century recipes & precious metals to craft exquisite photographic prints.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 381 Strategic Branding & Advertising Design 3(2-3)
Fall.
Students focus on how design methodologies and branding influences an audience. Client relations and design communication are a primary emphasis in this process oriented course.
Prerequisite: ART 281.
Corequisite: None.
Registration Information: None.

ART 382 Methods of Character Design 3(1-4)
As Needed.
Take on the role of a character designer or illustrator by exploring the various processes and concepts that go into creating effective game characters.
Prerequisite: ART 274 or MAE 251.
Corequisite: None.
Registration Information: None.

ART 383 Exhibition Design 2(0-4)
As Needed.
Communication and design principles applied to the display of objects. Special attention to museum and gallery installations.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

ART 397 Studio Series (1-3 V)
As Needed.
Advanced studio offerings for students who have completed all other course offerings in a specific discipline. Scheduled concurrently with lower-division studios.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (9).

ART 410 Senior Career Orientation 1(1-0)
As Needed.
Formal presentation of student's portfolio or art history research to the art faculty. Senior exhibition, artist's statement, resumes and job placement interviews.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing.

ART 412 Contemporary Art (1-3 V)
As Needed.
A study of selected recent developments in the visual arts. Reading, viewing, and discussion of new developments in media, art theory and criticism.
Prerequisite: ARH 411.
Corequisite: None.
Registration Information: None.

ART 415 Exhibiting Latinx/Chicanx Art 3(1-4)
As Needed.
Examine what it means to create exhibitions of Latinx/Chicanx/Indigenous art in museums and galleries. Bridging theory and practice, the course explores the history of exhibiting Latinx/Chicanx/Indigenous Art.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ART 422 Social Art Practices 3(1-4)
As Needed.
Explore new art practices that engage with communities around them. Create and design projects that involve social interaction and participation as a mode of expression and activism.
Prerequisites: ARC 310.
Corequisites: None.
Registration Information: None.

ART 433 Advanced Site Art 3(1-4)
As Needed.
Advanced projects in Site Art that involve the presentation and creation of site specific sculptural forms.
Prerequisite: ART 333.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (9).

ART 434 Painting III 3(1-4)
Fall.
Advanced painting with an emphasis on individual development. Focus pertains to formal, pictorial and technical problems met in developed personal imagery.
Prerequisite: ART 334.
Corequisite: None.
Registration Information: Repeatable (9).

ART 442 Drawing IV 3(1-4)
Spring.
Emphasis on development of individual skills of perception and exploration of new techniques and materials.
Prerequisite: ART 342.
Corequisite: None.
Registration Information: Repeatable (9).

ART 447 Advanced Ceramics 3(1-4)
Fall, Spring, Summer.
This course explores advanced theories and techniques involved in working with clay: forming, firing, glazing, kiln design and construction.
Prerequisite: ART 274.
Corequisite: None.
Registration Information: Repeatable (9).

ART 470 Printmaking III 3(1-4)
As Needed.
Introduction to lithography printing using stones, aluminum plates and photo processes in black and white and multiple color techniques.
Prerequisite: ART 370.
Corequisite: None.
Registration Information: Repeatable (9).

ART 474 Personal Vision: Digital Art & Animation 3(1-4)
As Needed.
Project proposal and exploration course with particular emphasis on process strategies for developing dynamic creative projects and/or installations in digital art & animation.
Prerequisite: ART 374 or MAE 240 or MAE 251.
Corequisite: None.
Registration Information: Repeatable (6).

ART 476 Personal Vision: Filmworks & Photography 3(1-4)
As Needed.
Project proposal and exploration course with particular emphasis on process strategies for developing dynamic time based, film, photographic or other creative media related projects.
Prerequisite: ART 274 or ART 276 or MAE 240 or MAE 251.
Corequisite: None.
Registration Information: Repeatable (6).

ART 477 Personal Vision: Studio Arts 3(1-4)
As Needed.
Project proposal and exploration course with particular emphasis on process strategies for developing dynamic projects through traditional and non-traditional studio art practices.
Prerequisites: ARC 310.
Corequisites: None.
Registration Information: None.

ART 481 Visual Communication: Production Studio 3(1-4)
Spring.
Experience what professional designers do on a daily basis. Students will be challenged to conduct research, reflect, make, and communicate, both individually and in small teams.
Prerequisite: ART 381.
Corequisite: None.
Registration Information: Repeatable (6).

ART 482 3D Worlds & Game Environments 3(1-4)
As Needed.
Explore the rich visual history of game environments and the influences that inform their themes and styles while building the necessary components for your own unique 3D worlds.
Prerequisites: ART 274 or ME 251.
Corequisites: None.
Registration Information: None.

ART 491 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ART 494 Field Experience (1-6 V)
As Needed.
Off-campus individual experience providing transition from classroom instruction to on-the-job experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing and permission of instructor. Repeatable (6).

ART 495 Independent Study (1-5 V)
As Needed.
Individual tutorial experience. Prerequisite: Junior or senior standing and permission of instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Permission of instructor.

ART 496 Cooperative Education Placement (1-4 V)
As Needed.
Cooperative Education Placement.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

ART 497 Studio Series (1-3 V)
As Needed.
Advanced sections of studio offerings.
Prerequisite: ART 397.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

ART 500 Workshop (1-5 V)
As Needed.
Using materials and techniques based on advanced concepts and ideas.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing and permission of instructor. Repeatable (99).

ART 511 Twentieth-Century Art (1-3 V)
As Needed.
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: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

ART 512 Contemporary Art 3(3-0)
As Needed.
Advanced study in contemporary art and associated criticism, aesthetics and the philosophy of art through the end of the twentieth century.
Prerequisite: ART 212.
Corequisite: None.
Registration Information: Permission of instructor.

ART 533 Graduate Level Sculpture/Public Art 3(0-6)
As Needed.
Graduate level work in sculpture/public art including explorations in content, context, critique and techniques.
Prerequisite: None.
Corequisite: None.
Registration Information: Three semesters of undergraduate sculpture or permission of instructor. Repeatable (99).

ART 534 Graduate Painting 3(1.5-3)
As Needed.
Explore principles, theories, and techniques in contemporary painting: content/imagery, materials and paint handling, work in a series, exhibition, historical research, aesthetic discussion and critiques.
Prerequisite: ART 242 and ART 434.
Corequisite: None.
Registration Information: Admission to graduate Teacher Education Program. Repeatable (99).

ART 542 Graduate Drawing 3(1-4)
As Needed.
Professional drawing practices utilizing quality papers and display presentation.
Prerequisite: ART 412.
Corequisite: None.
Registration Information: None.

ART 547 Ceramics (1-3 V)
As Needed.
Graduate level work in clay including explorations in ceramic content, context, critique and techniques (forming, firing and glazing).
Prerequisite: None.
Corequisite: None.
Registration Information: Three semesters of undergraduate ceramics or permission of instructor. Repeatable (99).

ART 570 Graduate Printmaking 3(0-6)
As Needed.
Graduate students will develop their personal, creative approach to image making through innovative exploration of relief, intaglio or lithography.
Prerequisite: ART 470.
Corequisite: None.
Registration Information: None.

ART 574 Graduate Digital Art 3(1.5-3)
As Needed.
Explore principles, theories, and techniques in contemporary digital art: content/imagery, work in a series, exhibition, historical research, aesthetic discussion and critiques.
Prerequisite: ART 242 and ART 334 and ART 474.
Corequisite: None.
Registration Information: Admission to graduate Teacher Education Program. Advisor approval required for prerequisite equivalents. Repeatable (99).

ART 576 Graduate Photography 3(1.5-3)
As Needed.
Explore principles, theories, and techniques in contemporary photography: content/imagery, programs, appropriate media output, work in a series, exhibition, historical research, aesthetic discussion and critiques.
Prerequisite: ART 374 and ART 476.
Corequisite: None.
Registration Information: Admission to graduate Teacher Education Program or permission of instructor. Advisor approval required for prerequisite equivalence. Repeatable (99).

ART 591 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing and permission of instructor. Repeatable (99).

ART 597 Studio Series (1-3 V)
As Needed.
Graduate level studies.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

Art & Creative Media, Bachelor of Arts

Department of Art Student Learning Outcomes & Assessment Activities

1. Students will apply discipline-specific competencies for success in their emphasis area.
   - Outcome Assessment Activity: ART 410 Senior Career Orientation (1 c.h.) 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 Senior Career Orientation (1 c.h.) with exit survey
4. Students will make use of intellectual and practical skills for lifelong learning.
   - Outcome Assessment Activity: Internships with employee surveys
5. Students will create original work suitable for entry into a juried exhibition.
   - Outcome Assessment Activity: Annual juried art show and any non-juried student on-campus shows
6. Art education students will be able to apply the knowledge and skills needed to help children learn to create and appreciate art.
   - Outcome Assessment Activity: PLACE test in addition to other BA measurements

Specific Program Requirements

Students in this program must complete an Enrichment Minor: Any 18 credit University minor program (9 upper division minimum) outside of major.

Specific Core Requirements

Specific Core Requirements

Course	Title	Credits
ARC 110	Integrated Studies	3
ARC 174	Fundamentals of Digital Media	3
ARC 210	ARC: Design Frameworks	3
ARH 211	Global Art I (GT-AH1)	3
ARH 212	Global Art II (GT-AH1)	3
ART 141	Drawing I: Observational Drawing	3
ART 176	Photography: Expressive Composition	3
Total Credits		**21**

Additional Requirements

Course	Title	Credits
Required Explorations	**Select at least 9 credits of the following:**	**9**
ARC 229	Practicum: Journalism & Print Publications	1
ARC 239	Practicum: Sound, Radio, & Podcasting	1
ARC 249	Practicum: Film, Video, & Television	1
ARC 259	Practicum: Media Design & Advertising	1
ART 233	Sculpture I	3
ART 234	Painting I	3
ART 242	Drawing II: Life Drawing	3
ART 247	Ceramics I	3
ART 274	Art & Design Essentials	3
ART 276	Photography: Creative Lighting	3
ART 281	Principles of Graphic Design	3
Art History	**Select at least 9 credits from the following. 3 credits MUST be ARH 411.**	**9**
ARH 313	Renaissance Art	3
ARH 316	Women in Art	3
ARH 317	History of Architecture	3
ARH 318	History of Photography	3
ARH 411	Theory & Methods Course is required to fulfill 12 Art History credits.	3
ARH 413	Native American Art	3
ARH 415	Latin American Art	3
ARH 416	Art & Race in the Americas	3
ARH 417	Global Encounters & Exchanges 1450-1800	3
ARH 418	Public Art	3
MST 300	Museum Ethics & Issues	3
Professional Development	**Select at least 2 credits from the following:**	**2**
ARC 310	Critical Fundamental Skills Review	1
ARC 410	Senior Capstone Presentation	1
Electives	**Select at least 18 credits from the following.**	**18**
ART 333	Sculpture II: Site Art	3
ART 334	Painting II	3
ART 342	Drawing III	3
ART 347	Ceramics II	3
ART 370	Printmaking II	3
ART 374	Motion Graphics	3
ART 376	Photography: Digital to Darkroom	3
ART 381	Graphic Design Techniques	3
ART 382	Methods of Character Design	3
ART 397	Studio Series	1-3
ART 433	Advanced Site Art	3
ART 434	Painting III	3
ART 442	Drawing IV	3
ART 447	Advanced Ceramics	3
ART 470	Printmaking III	3
ART 474	Personal Vision: Digital Art & Animation	3
ART 476	Personal Vision: Creative Media	3
ART 481	Graphic Design Studio	3
ART 482	3D Worlds & Game Environments	3
ART 491	Special Topics	1-5
ART 494	Field Experience	1-6
ART 495	Independent Study	1-5
ART 497	Studio Series	1-3
Total Credits		**38**

World Language Requirements for the BA Degree Art Major

Students seeking the degree of Bachelor of Arts must complete one of the three options listed below[1]:

1. Completion of the second level of a world language (course number 102)[2]
   - Students may test out of the course
2. Completion of WL 100 Intro to Comparative Linguistics (3 c.h.), and ANTH 106 Language, Thought and Culture (3 c.h.)/ENG 106 Language, Thought and Culture (3 c.h.)
3. Completion of the second level of American Sign Language.

[1] International students for whom English is a second language may substitute two terms of English courses (excluding ENG 101 Rhetoric & Writing I (GT-CO1) (3 c.h.) and ENG 102 Rhetoric & Writing II (GT-CO2) (3 c.h.)) for the world language requirement.

[2] Completion of a world language course above 102 with a grade of C or better will satisfy the requirement.

Specific Graduation Requirements
Art & Creative Media, Minor

The art & creative media minor functions to enrich the educational experience of a variety of majors. Students benefit from exposure to methodologies and tools to explore creative project solving in the world of creative industries. The art & creative media minor is a useful complement to a major in Business, Engineering, History, Media Communication, Music as well as most STEM related majors.

Specific Program Requirements

Course	Title	Credits
ARC 110	Integrated Studies	3
ARC 174	Fundamentals of Digital Media	3
ARH 211	Global Art I (GT-AH1)	3
ART 141	Drawing I: Observational Drawing	3
or ART 176	Photography: Expressive Composition	
Select at least three credits from the following: Must have advisor approval.		3

ARC 229	Practicum: Journalism & Print Publications	1
ARC 239	Practicum: Sound, Radio, & Podcasting	1
ARC 249	Practicum: Film, Video, & Television	1
ARC 259	Practicum: Media Design & Advertising	1
ART 233	Sculpture I	3
ART 234	Painting I	3
ART 242	Drawing II: Life Drawing	3
ART 247	Ceramics I	3
ART 270	Printmaking I	3
ART 274	Art & Design Essentials	3
ART 276	Photography: Creative Lighting	3
ART 281	Principles of Graphic Design	3
ART 291	Special Topics	1-3
Select at least six credits from the following: Must have advisor approval.		6
ARC 329	Advanced Practicum: Journalism & Print Publication	2
ARC 339	Advanced Practicum: Sound, Radio, & Podcasting	2
ARC 349	Advanced Practicum: Film, Video, & Television	2
ARC 359	Advanced Practicum: Media Design & Advertising	2
ART 333	Sculpture II: Site Art	3
ART 334	Painting II	3
ART 342	Drawing III	3
ART 347	Ceramics II	3
ART 370	Printmaking II	3
ART 374	Motion Graphics	3
ART 376	Photography: Digital to Darkroom	3
ART 381	Graphic Design Techniques	3
ART 382	Methods of Character Design	3
ART 397	Studio Series	1-3
ART 433	Advanced Site Art	3
ART 434	Painting III	3
ART 442	Drawing IV	3
ART 447	Advanced Ceramics	3
ART 470	Printmaking III	3
ART 474	Personal Vision: Digital Art & Animation	3
ART 476	Personal Vision: Creative Media	3
ART 481	Graphic Design Studio	3
ART 482	3D Worlds & Game Environments	3
ART 491	Special Topics	1-3
ART 494	Field Experience	1-6
ART 495	Independent Study	1-5
ART 497	Studio Series	1-3
Total Credits		**21**

Art & Creative Media: Art History Concentration, Bachelor of Arts

The Bachelor of Arts in Art History challenges students to examine art and architecture throughout the world and to become familiar with diverse cultures, religions, and perspectives. Art history courses investigate political, economic, and cultural factors in artistic production and reception. In addition to art history courses encompassing a variety of time periods, geographic regions, and theoretical frameworks, the degree includes studio art courses that provide experience with artmaking and courses in related fields, such as history and museum studies. The BA in Art History fosters skills that lend themselves to a variety of career paths and fields of graduate study.

Department of Art Student Learning Outcomes & Assessment Activities

1. Students will apply discipline-specific competencies for success in their concentration area.
   - Outcome Assessment Activity: ART 410 Senior Career Orientation (1 c.h.) 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 Senior Career Orientation (1 c.h.) with exit survey
4. Students will make use of intellectual and practical skills for lifelong learning.
   - Outcome Assessment Activity: Internships with employee surveys
5. Students will create original work suitable for entry into a juried exhibition.
   - Outcome Assessment Activity: Annual juried art show and any non-juried student on-campus shows
6. Art education students will be able to apply the knowledge and skills needed to help children learn to create and appreciate art.
   - Outcome Assessment Activity: PLACE test in addition to other BA measurements

Specific Program Requirements

Specific Core Requirements

Specific Core Requirements

Course	Title	Credits
ARC 110	Integrated Studies	3
ARC 174	Fundamentals of Digital Media	3
ARC 210	ARC: Design Frameworks	3
ARH 211	Global Art I (GT-AH1)	3
ARH 212	Global Art II (GT-AH1)	3
ART 141	Drawing I: Observational Drawing	3
ART 176	Photography: Expressive Composition	3
Total Credits		**21**

Specific Concentration Requirements

Course	Title	Credits
Required Explorations: Art History Concentration Select at least 6 credits of the following:		**6**
ARC 229	Practicum: Journalism & Print Publications	1
ARC 239	Practicum: Sound, Radio, & Podcasting	1
ARC 249	Practicum: Film, Video, & Television	1
ARC 259	Practicum: Media Design & Advertising	1
ART 233	Sculpture I	3
ART 234	Painting I	3
ART 242	Drawing II: Life Drawing	3
ART 247	Ceramics I	3

ART 270	Printmaking I	3
ART 274	Art & Design Essentials	3
ART 276	Photography: Creative Lighting	3
ART 281	Principles of Graphic Design	3
Art History	**Select at least 18 credits from the following.**	**18**
ARH 313	Renaissance Art	3
ARH 316	Women in Art	3
ARH 317	History of Architecture	3
ARH 318	History of Photography	3
ARH 411	Theory & Methods	3
ARH 413	Native American Art	3
ARH 415	Latin American Art	3
ARH 416	Art & Race in the Americas	3
ARH 417	Global Encounters & Exchanges 1450-1800	3
ARH 418	Public Art	3
MST 300	Museum Ethics & Issues	3
Professional Development	**Select at least 2 credits from the following:**	**2**
ARC 310	Critical Fundamental Skills Review	1
ARC 410	Senior Capstone Presentation	1
Electives	**Student may also choose ANTH, CS, HIST, INTL, or PHIL. Must be upper division.**	**12**
ARH 313	Renaissance Art	3
ARH 316	Women in Art	3
ARH 317	History of Architecture	3
ARH 318	History of Photography	3
ARH 413	Native American Art	3
ARH 415	Latin American Art	3
ARH 416	Art & Race in the Americas	3
ARH 417	Global Encounters & Exchanges 1450-1800	3
ARH 418	Public Art	3
ART 491	Special Topics	1-5
MST 300	Museum Ethics & Issues	3
Total Credits		**38**

Students seeking the degree of Bachelor of Arts must complete one of the three options listed below[1]:

1. Completion of the second level of a world language (course number 102)[2]
   - Students may test out of the course
2. Completion of WL 100 Intro to Comparative Linguistics (3 c.h.), and ANTH 106 Language, Thought and Culture (3 c.h.)/ENG 106 Language, Thought and Culture (3 c.h.)
3. Completion of the second level of American Sign Language.

[1] International students for whom English is a second language may substitute two terms of English courses (excluding ENG 101 Rhetoric & Writing I (GT-CO1) (3 c.h.) and ENG 102 Rhetoric & Writing II (GT-CO2) (3 c.h.)) for the world language requirement.

[2] Completion of a world language course above 102 with a grade of C or better will satisfy the requirement.

Art & Creative Media: Creative Media Concentration, Bachelor of Fine Arts

Specific Program Requirements

Students in this program must complete an Enrichment Minor: Any 21 credit University minor program (9 upper division minimum) outside of major.

Specific Core Requirements

Course	Title	Credits
ARC 110	Integrated Studies	3
ARC 174	Fundamentals of Digital Media	3
ARC 210	ARC: Design Frameworks	3
ARH 211	Global Art I (GT-AH1)	3
ARH 212	Global Art II (GT-AH1)	3
ART 141	Drawing I: Observational Drawing	3
ART 176	Photography: Expressive Composition	3
Total Credits		**21**

Specific Concentration Requirements

Course	Title	Credits
Required Explorations		**9**
ART 274	Art & Design Essentials	3
ART 276	Photography: Creative Lighting	3
ART 281	Principles of Graphic Design	3
Required Exploration Electives	**Select three credits from the following:**	**3**
ARC 229	Practicum: Journalism & Print Publications	1
ARC 239	Practicum: Sound, Radio, & Podcasting	1
ARC 249	Practicum: Film, Video, & Television	1
ARC 259	Practicum: Media Design & Advertising	1
ART 233	Sculpture I	3
ART 234	Painting I	3
ART 242	Drawing II: Life Drawing	3
ART 247	Ceramics I	3
Art History	**Select 9 credits from the following. 3 credits MUST be ARH 411.**	**9**
ARH 313	Renaissance Art	3
ARH 316	Women in Art	3
ARH 317	History of Architecture	3
ARH 318	History of Photography	3
ARH 411	Theory & Methods	3
ARH 413	Native American Art	3
ARH 415	Latin American Art	3
ARH 416	Art & Race in the Americas	3
ARH 417	Global Encounters & Exchanges 1450-1800	3
ARH 418	Public Art	3
MST 300	Museum Ethics & Issues	3
Professional Development		**2**
ARC 310	Critical Fundamental Skills Review	1
ARC 410	Senior Capstone Presentation	1
Concentration Requirements		**12**
ART 374	Motion Graphics	3
ART 376	Photography: Digital to Darkroom	3

ART 381	Graphic Design Techniques	3
ART 474	Personal Vision: Digital Art & Animation	3
Concentration Electives	**Must be ARC or ART prefix. Must be upper division.**	**6**
Please Note: Courses cannot be repeated for credit.		
Senior Studio	**Choose one of the following:**	**3**
ART 476	Personal Vision: Creative Media	3
ART 481	Graphic Design Studio	3
Total Credits		**44**

Art & Creative Media: K-12 Teacher Preparation Concentration, Bachelor of Arts

Department of Art Student Learning Outcomes & Assessment Activities

1. Students will apply discipline-specific competencies for success in their concentration area.
   - Outcome Assessment Activity: ART 410 Senior Career Orientation (1 c.h.) 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 Senior Career Orientation (1 c.h.) with exit survey
4. Students will make use of intellectual and practical skills for lifelong learning.
   - Outcome Assessment Activity: Internships with employee surveys
5. Students will create original work suitable for entry into a juried exhibition.
   - Outcome Assessment Activity: Annual juried art show and any non-juried student on-campus shows
6. Art education students will be able to apply the knowledge and skills needed to help children learn to create and appreciate art.
   - Outcome Assessment Activity: PLACE test in addition to other BA measurements

Specific Program Requirements

Specific Core Requirements

Course	Title	Credits
ARC 110	Integrated Studies	3
ARC 174	Fundamentals of Digital Media	3
ARC 210	ARC: Design Frameworks	3
ARH 211	Global Art I (GT-AH1)	3
ARH 212	Global Art II (GT-AH1)	3
ART 141	Drawing I: Observational Drawing	3
ART 176	Photography: Expressive Composition	3
Total Credits		**21**

Specific Concentration Requirements

Course	Title	Credits
Required Explorations	**Select at least 12 credits of the following:**	**12**
ART 233	Sculpture I	3
ART 234	Painting I	3
ART 242	Drawing II: Life Drawing	3
ART 247	Ceramics I	3
ART 270	Printmaking I	3
ART 274	Art & Design Essentials	3
ART 276	Photography: Creative Lighting	3
ART 281	Principles of Graphic Design	3
Art History	**Select at least 3 credits from the following. 3 credits MUST be ARH 411.**	**6**
ARH 313	Renaissance Art	3
ARH 316	Women in Art	3
ARH 317	History of Architecture	3
ARH 318	History of Photography	3
ARH 411	Theory & Methods	3
ARH 413	Native American Art	3
ARH 415	Latin American Art	3
ARH 416	Art & Race in the Americas	3
ARH 417	Global Encounters & Exchanges 1450-1800	3
ARH 418	Public Art	3
MST 300	Museum Ethics & Issues	3
Professional Development	**Select at least 2 credits from the following:**	**2**
ARC 310	Critical Fundamental Skills Review (new coursework series ARC series)	1
ARC 410	Senior Capstone Presentation (new course series ARC prefix)	1
Electives	**Select at least 9 credits from the following. Must have advisor approval.**	**9**
ARC 329	Advanced Practicum: Journalism & Print Publication	2
ARC 339	Advanced Practicum: Sound, Radio, & Podcasting	2
ARC 349	Advanced Practicum: Film, Video, & Television	2
ARC 359	Advanced Practicum: Media Design & Advertising	2
ART 333	Sculpture II: Site Art	3
ART 334	Painting II	3
ART 342	Drawing III	3
ART 347	Ceramics II	3
ART 370	Printmaking II	3
ART 374	Motion Graphics	3
ART 376	Photography: Digital to Darkroom	3
ART 381	Graphic Design Techniques	3
ART 382	Methods of Character Design	3
ART 397	Studio Series	1
ART 433	Advanced Site Art	3
ART 434	Painting III	3
ART 442	Drawing IV	3
ART 447	Advanced Ceramics	3
ART 470	Printmaking III	3
ART 474	Personal Vision: Digital Art & Animation	3
ART 476	Personal Vision: Creative Media	3
ART 481	Graphic Design Studio	3

ART 482	3D Worlds & Game Environments	3
ART 491	Special Topics	1
ART 494	Field Experience	1-6
ART 495	Independent Study	1
ART 497	Studio Series	1
Total Credits		**29**

World Language Requirements for the BA Degree Art Major

Students seeking the degree of Bachelor of Arts must complete one of the three options listed below[1]:

1. Completion of the second level of a world language (course number 102)[2]
    - Students may test out of the course
2. Completion of WL 100, and ANTH/ENG 106
3. Completion of the second level of American Sign Language.

[1] International students for whom English is a second language may substitute two terms of English courses (excluding ENG 101 Rhetoric & Writing I (GT-CO1) (3 c.h.) and ENG 102 Rhetoric & Writing II (GT-CO2) (3 c.h.)) for the world language requirement.

[2] Completion of a world language course above 102 with a grade of C or better will satisfy the requirement.

Students completing a major in Art with a concentration in K-12 are required to complete a minor in education and meet all other requirements outlined by the Teacher Education Program.

Specific Requirements for the Secondary and K-12 Teaching Endorsements/Minor

The student must complete an appropriate major and the following Education courses:

Course	Title	Credits
Select one of the following:		3
PSYC 151	Human Development (GT-SS3)	3
PSYC 251	Childhood and Adolescence	3
PSYC 342	Educational Psychology	3
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology [2]	3
ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
RDG 435	Disciplinary Literacy [3, 5]	4
Special Methods in Endorsement Areas (Prerequisites - Admission to Education) [5]		4
ED 412	Teaching Diverse Learners [4, 5]	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
or ED 489	Student Teaching K-12	
Total Credits [3]		37-40

[1] Music students may take PSYC 151 Human Development (GT-SS3) (3 c.h.)or PSYC 251 Childhood and Adolescence (3 c.h.).

[2] Music Education students may complete MUS 103 Music and Computer Technology I (1 c.h.) and MUS 306 Technology for Music Educators (2 c.h.) for ED 280 Educational Media and Technology (3 c.h.).

[3] English/Language Arts student must also complete RDG 410 Teaching Reading (3 c.h.)

[4] Physical Education students may complete EPER 465 Adapted Physical Education (3 c.h.) or ED 412 Teaching Diverse Learners (3 c.h.).

[5] GPA of 2.6 required

Art & Creative Media: Studio Arts Concentration, Bachelor of Fine Arts

Specific Program Requirements

Students in this program must complete an Enrichment Minor: Any 21 credit University minor program (9 upper division minimum) outside of major.

Specific Core Requirements

Specific Core Requirements

Course	Title	Credits
ARC 110	Integrated Studies	3
ARC 174	Fundamentals of Digital Media	3
ARC 210	ARC: Design Frameworks	3
ARH 211	Global Art I (GT-AH1)	3
ARH 212	Global Art II (GT-AH1)	3
ART 141	Drawing I: Observational Drawing	3
ART 176	Photography: Expressive Composition	3
Total Credits		**21**

Specific Concentration Requirements

Course	Title	Credits
Required Explorations		**9**
ART 242	Drawing II: Life Drawing	3
ART 233	Sculpture I	3
or ART 247	Ceramics I	
ART 234	Painting I	3
or ART 270	Printmaking I	
Required Explorations Electives	**Select 3 credits from the following:**	**3**
ARC 229	Practicum: Journalism & Print Publications	1
ARC 239	Practicum: Sound, Radio, & Podcasting	1
ARC 249	Practicum: Film, Video, & Television	1
ARC 259	Practicum: Media Design & Advertising	1
ART 274	Art & Design Essentials	3
ART 276	Photography: Creative Lighting	3
ART 281	Principles of Graphic Design	3
Art History	**Select at least 9 credits from the following. 3 credits MUST be ARH 411.**	**9**
ARH 313	Renaissance Art	3.0
ARH 316	Women in Art	3
ARH 317	History of Architecture	3
ARH 318	History of Photography	3
ARH 411	Theory & Methods	3
ARH 413	Native American Art	3.0
ARH 415	Latin American Art	3.0

ARH 416	Art & Race in the Americas	3
ARH 417	Global Encounters & Exchanges 1450-1800	3.0
ARH 418	Public Art	3
MST 300	Museum Ethics & Issues	3
Professional Development	**Select at least 2 credits from the following:**	**2**
ARC 310	Critical Fundamental Skills Review	1
ARC 410	Senior Capstone Presentation	1
Concentration Requirements	**Select 2 sets from the following:**	**12**
ART 333 & ART 433	Sculpture II: Site Art and Advanced Site Art	6
ART 334 & ART 434	Painting II and Painting III	6
ART 342 & ART 442	Drawing III and Drawing IV	6
ART 347 & ART 447	Ceramics II and Advanced Ceramics	6
ART 370 & ART 470	Printmaking II and Printmaking III	6
Electives	**Select at least 9 credits from the following.**	**9**
ARC 329	Advanced Practicum: Journalism & Print Publication	2
ARC 339	Advanced Practicum: Sound, Radio, & Podcasting	2
ARC 349	Advanced Practicum: Film, Video, & Television	2
ARC 359	Advanced Practicum: Media Design & Advertising	2
ART 333	Sculpture II: Site Art	3
ART 334	Painting II	3
ART 342	Drawing III	3
ART 347	Ceramics II	3
ART 370	Printmaking II	3
ART 374	Motion Graphics	3
ART 376	Photography: Digital to Darkroom	3
ART 381	Graphic Design Techniques	3
ART 382	Methods of Character Design	3
ART 397	Studio Series	1-3
ART 433	Advanced Site Art	3
ART 434	Painting III	3
ART 442	Drawing IV	3
ART 447	Advanced Ceramics	3
ART 470	Printmaking III	3
ART 474	Personal Vision: Digital Art & Animation	3
ART 476	Personal Vision: Creative Media	3
ART 481	Graphic Design Studio	3
ART 482	3D Worlds & Game Environments	3
ART 491	Special Topics	1-5
ART 494	Field Experience	1-6
ART 495	Independent Study	1-5
ART 497	Studio Series	1-3
Total Credits		**44**

Specific Graduation Requirements

Enrichment Minor: Complete any 21 credit University minor program (9 upper division minimum) outside of major.

Cannabis Studies, Minor

Mission

The Cannabis Studies minor offers students opportunities to become ethical, socially responsible, engaged citizens, who are prepared to assume leadership in a dynamic global context of cannabis normalization by exposing students to a variety of cannabis-related topics, perspectives, and courses from across disciplines within CHASS.

The minor is designed to complement majors in Cannabis Biology & Chemistry, Business, Criminology, History, Political Science, Psychology, Social Work, Sociology, and more. Instruction and assignments develop the aesthetic, creative, critical, and theoretical acumen of students, and encourage students to direct their learning and customize their Cannabis Studies to ensure that they learn what is needed to realize their future educational and career goals.

Who should consider a minor in Cannabis Studies?

- Anyone interested in working in the cannabis industry
- Anyone interested in researching the effects of cannabis on society and vice versa
- Anyone interested in cannabis lifestyle and subcultures
- Anyone planning for a career in a sector affected by cannabis legalization such as business, criminal justice, education, public health, and more
- Anyone interested in a social scientific approach to an emerging field of study

The Cannabis Studies minor is open to all majors.

Advising

Student should contact Dr. Aaron Johnson at aaron.johnson@csupueblo.edu | 720-446-9810 (call or text), or call the College of Humanities, Arts, & Social Sciences Dean's office at 719-549-2863.

Student Learning Outcomes

Students will be able to:

1. Students will demonstrate a mastery knowledge of the social history of cannabis, and the impact of its use and regulation on society, culture, and the environment at the local, state, and national level.
2. Students will demonstrate a mastery knowledge of the historical trends, current status, and potential developments in cannabis-related social science research, business practices, politics, entertainment, and lifestyles.
3. Students will demonstrate the ability to effectively communicate in writing and verbally about cannabis-related issues from a variety of disciplinary perspectives.
4. Students will apply what they've learned from their Cannabis Studies minor course work to future educational and career endeavors through special projects, research, field experiences, and/or other independent study, as appropriate.

Outcome Assessment Activities

Student learning is measured through a combination of required course components and dedicated assessment activities including exams, written and verbal demonstrations of knowledge, as well as the analysis of the

quality and quantity of special projects, research, field experiences, and/or other independent study by students. The results of these assessment activities are used to improve program offerings and enhance student learning.

Specific Program Requirements

Course	Title	Credits
Core Courses		**7**
CAN 493	Senior Seminar	1
SOC/CRIM 261	Introduction to Cannabis Studies	3
SOC/CRIM 361	Advanced Cannabis Studies	3
Elective Courses		**11**
Select 11 credits from the following (or other elective courses as approved): [1]		
CRIM/SOC/WS 305	Women & Crime	3
CS/SW 325	Health in the Chicano Community	3
POLS 323	Criminal Law & Procedure	3
POLS 340	Public Policy	3
PSYC 220	Drugs and Behavior	3
PSYC 331	Physiological Psychology	3
PSYC 331L	Physiological Psychology Lab	1
PSYC 362	Abnormal Psychology	3
PSYC 428	Cannabinoids as Medicine	3
SOC 201	Social Problems (GT-SS1)	3
SOC 203	The Criminal Justice System	3
SOC/PSYC 352	Social Psychology	3
SOC 378	Rock 'n' Roll and Rebellion	3
SOC 405	Law & Society	3
SOC 418	Crime, Drugs, & Social Policy	3
SOC 452	The Individual & Society	3
SOC 490	Special Projects	1-3
SOC 492	Research	1-3
SOC 494	Field Experience	1-12
SOC 495	Independent Study	1-10
SW 325	Health in the Chicano Community	3
Total Credits		**18**

[1] Note: Many of these electives have prerequisites that would satisfy general education requirements.

Chicano/a Studies, Minor

The Chicano/a studies minor complements majors and careers in law, sociology, social work, languages, education, government, business and other disciplines. Courses offer unique undergraduate preparation for those who seek entrance to graduate studies in law, humanities or the social sciences.

Students who plan to live and work in the American Southwest or aspire to careers that involve relations in the American continents are likely to be well served by Chicano/a Studies courses. The interdisciplinary approach emphasizes history and cultural studies, and selected courses provide the student with in-depth knowledge of specific aspects of the Chicano/a community.

Program Goals

- To provide individual courses as well as a minor to fulfill the unique role and mission of Colorado State University Pueblo.
- To offer an individually designed minor in support of students' majors.

Student Learning Outcomes

Students will be able to:

- Critically examine the social, historical, and cultural relevance of Chicanos within the United States and the US/Mexico borderlands.
- Analyze the complexities of Chicano identity.
- Evaluate the contributions of women within Chicano history.
- Examine and interpret how Chicanos have impacted the culture, politics, and history of Southern Colorado.

Student learning outcomes will be included in the academic catalog, the website, and the syllabus for the capstone course.

Outcomes Assessment Activities

- An annual review of student's capstone projects is conducted to evaluate the programs goals and student learning outcomes.
- The program is developing a means of measuring student's progress in core courses.

Specific Program Requirements

Course	Title	Credits
Required Courses		
CS 101	Introduction to Chicano Studies (GT-HI1)	3
CS 136	The Southwest United States (GT-HI1)	3
CS 306	La Chicana	3
CS 346	History of Mexico	3
CS 485	Capstone	3
Electives		
Selet 9 credits		9
Total Credits		**24**

Electives

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.

Course	Title	Credits
CS/ENG 220	Survey of Chicano Literature (GT-AH2)	3
CS/SW 230	Chicano: Social & Psychological Study (GT-SS3)	3
CS 235	Ballet Folklorico	3
CS 291	Special Topics	1-3
CS 303	Chicano Labor History in the United States	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 Feminisms	3

CS/HIST 489	Borderlands	3
CS 491	Special Topics	1-3
CS 495	Independent Study	1-3
CS 498	Internship	1-3

Performance Criteria

Upon completion of the minor students are to submit a copy of their capstone project to the coordinator and two individuals chosen by the dean to review their capstone project to see if it fits the goals and SLOs of the program. A total of 80% of the students should have met the outcomes and goals of the program. Papers will be assessed every spring.

Students must earn a C or better in all courses applicable to the minor.

Creative Industry Essentials, Certificate

Students can enhance their degree with a 12-hour multidisciplinary certificate in Creative Industry Essentials. The certificate is designed to provide an introduction to the tools and techniques commonly found in the creative industries. Students are given the flexibility to customize their certificate by choosing any four courses out of a list of options.

Program Goals

1. Offer a marketable and professionally credible program.

- Provide a comprehensive foundation of media and entertainment theory and practice.
- Emphasize writing and multimedia production as strategic and professional communication.
- Emphasize personal ethics and professional ethics codes.
- Ensure curriculum meets standards of the professions represented.

2. Provide a student-centered experience for learning and advising.

- Create a proactive student-faculty advising experience.
- Create a collaborative department culture.
- Recognize student accomplishments and outstanding performance.

3. Create an applied learning environment with cutting-edge technology.

- Provide practical opportunities for all Media & Entertainment majors.
- Offer a full range of internships at the junior and senior level.
- Provide technology for pedagogical and professional purposes.
- Create experiential courses that are interactive, applied, and project-oriented.

4. Maintain a reputation for excellence.

- Maintain alumni relationships through an online database, guest speakers, active program advisory board, 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, entertainment, and related disciplines.
2. Students will communicate 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 concentration 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 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, practicum and professional internship evaluations, exit interviews, student employment upon graduation, and alumni feedback.

Specific Program Requirements

Course	Title	Credits
ARC 174	Fundamentals of Digital Media	3
Choose 9 hours from the following:		**9**
MAE 230	Sound, Radio, & Podcasting Essentials	3
MAE 240	Film & Video Essentials	3
MAE 250	Media Design Essentials	3
or ART 274	Art & Design Essentials	
MAE 251	Gaming & Immersive Media Essentials	3
ART 176	Photography: Expressive Composition	3
ART 276	Photography: Creative Lighting	3
Total Credits		**12**

Diversity Studies, Certificate

The CSU Pueblo Diversity Studies certificate program is a 9-credit hour certificate program housed in the College of Humanities, Arts and Social Science (CHASS) under the department of Sociology, Criminology, and Anthropology, which also facilitates the Women's Studies minor program. This certificate provides an enriching, multidisciplinary experience for students through exposure to a variety of cultures, diverse social contexts, and lived experiences within the academic context. It will further prepare students for the social and cultural diversity of the world in which they live and work.

Upon completion of this certificate, students will understand the differences in various social and cultural experiences, which contribute to shaping their awareness and ability to connect with a worldview that values diversity and inclusivity. Students will develop theoretical awareness and practical knowledge to thrive in diverse local, national and international environments. They will also be better prepared to address the needs of diverse organizations and communities and to

assume leadership roles in their field of specialization with consideration to issues revolving around diversity and inclusion.

Program Goals

The CSU-Pueblo Diversity Studies certificate program is a 9-credit hour certificate program housed in the College of Humanities, Arts and Social Science (CHASS) under the department of Sociology, Criminology, and Anthropology, which also facilitates the Women's Studies minor program. This certificate provides an enriching, multidisciplinary experience for students through exposure to a variety of cultures, diverse social contexts, and lived experiences within the academic context. It will further prepare students for the social and cultural diversity of the world in which they live and work.

Upon completion of this certificate, students will understand the differences in various social and cultural experiences, which contribute to shaping their awareness and ability to connect with a worldview that values diversity and inclusivity. Students will develop theoretical awareness and practical knowledge to thrive in diverse local, national and international environments. They will also be better prepared to address the needs of diverse organizations and communities and to assume leadership roles in their field of specialization with consideration to issues revolving around diversity and inclusion.

Student Learning Outcomes

- Demonstrate a critical understanding of how diverse identities (such as, social class; sex, gender and sexual orientation; race and ethnicity; culture and nationality, disability and differing abilities; age; religion) intersect and are embedded and maintained in societal structures through social processes and intra and interpersonal relationships
- Apply the basic sociological concepts, theories and methods concerning diversity categories such as, gender, race and ethnicity, and class
- Recognize and combat stereotypes, myths and discriminatory attitudes and practices held by individuals and institutions in local, national, and global contexts
- Apply critical thinking skills and the requisite knowledge, empathy and awareness of self and others in relation to engaging in diversity and inclusivity in various social settings

Outcomes Assessment Activities

Assessment will be conducted through final written research projects. Rubrics to include the following assessment categories in line with Student Learning Outcomes.

- Show application of theoretical approaches to understand issues of diversity and social inequalities
- Show awareness of the history and dimensions of ethnic and racial diversity, gender differences, differences in sexual orientation, issues concerning disability, age, religion and social class
- Show awareness of concepts that will facilitate subsequent learning about the needs and lifestyles of various groups
- Demonstrate developing awareness of the ways in which institutional oppression and the misuse of power constrain human and legal rights of individuals and groups within society.
- Demonstrate developing critical self-awareness through identifying and analyzing their own personal values and ethical systems

Specific Program Requirements

Students are required to complete 9 credits for the certificate program. Student must complete each course with a grade of C or better.

Course	Title	Credits
DS 105	Understanding Human Diversity	3
DS 201	Diversty & Inclusion Class Race Gender & Sexuality	3
DS 202	Disability, Age, Religion & Inclusivity	3
Total Credits		**9**

English & World Languages Department

English Program

The major in English leads to a Bachelor of Arts (BA) degree and provides graduates with an understanding of language and literature as a basis for aesthetic, ethical, social, and academic ways of thinking, creating, and researching. The goal of the program is to develop general communication and learning skills and an understanding of the value of ongoing critical reading, thinking, and writing. Critical, analytical, and composition skills, which provide excellent preparation for professional careers in teaching, writing, editing and publishing, business, media, public service, law, and the arts are emphasized.

World Languages Program

The World Languages Program offers a Bachelor of Arts in Spanish (BA) intended to prepare students for the many careers where educated bilingual speakers are highly valued. Most of our students choose to double major or combine their Spanish BA with fields such as Social Work, Psychology, Sociology, English, Pre Nursing, Political Science, Media Communication, Business, Exercise Science, Public Health, etc. Other students complete their Spanish BA for teaching, translation certifications, or admission to graduate school.

Minors in 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 world language is desirable.

Courses in French, German, American Sign Language, and Comparative Linguistics (listed under WL) are offered as permitted by enrollment. Student exchanges with foreign universities and other study-abroad programs are encouraged.

Academic Programs

English

Undergraduate Programs

- English, Bachelor of Arts (p. 263)
- English: 7-12 Teacher Preparation Concentration, Bachelor of Arts (p. 265)
- English: Creative Writing Concentration, Bachelor of Arts (p. 266)

Minors

- Creative Writing, Minor (p. 262)
- English, Minor (p. 264)

World Language

Undergraduate Programs

- World Languages-Spanish, Bachelor of Arts (p. 268)
- World Languages-Spanish: K-12 Teacher Preparation Concentration, Bachelor of Arts (p. 269)
- World Languages-Spanish: Media & Entertainment Concentration, Bachelor of Arts (p. 271)
- World Languages-Spanish: Translation Studies Concentration, Bachelor of Arts (p. 272)

Minors

- Spanish, Minor (p. 267)

Certificates

- Advanced Spanish for the Health Professions, Certificate (p. 261)
- Basic Spanish for the Health Professions, Certificate (p. 262)

American Sign Language (ASL)

ASL 101 Beginning American Sign Language I 3(3-0)
Fall, Spring.
Development of beginner skills. Students learn the basics of the language and an introduction to communicating with the Deaf community. Basic vocabulary, conversational skills, and aspects of the Deaf culture and community.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

ASL 102 Beginning American Sign Language II 3(3-0)
Fall, Spring.
Development of beginner skills. Continues basic conversational patterns to communicate with the Deaf community. The course covers vocabulary, conversational skills, and aspects of the Deaf culture and community.
Prerequisite: ASL 101.
Corequisites: None.
Registration Information: Permission of instructor.
(Gen Ed: H) (CC)

ASL 201 Intermediate American Sign Language I 3(3-0)
As Needed.
Development of intermediate-level skills. Students develop a stronger grasp of American Sign Language and cultural features of the language. ASL vocabulary is increased with emphasis on expressive skills in signing.
Prerequisite: ASL 102.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

ASL 202 Intermediate American Sign Language II 3(3-0)
As Needed.
Development of intermediate-level skills. Provides further study of American Sign Language grammar, syntax, and cultural features. Continues to develop competency and fluency in the language. Variations in ASL are addressed.
Prerequisite: ASL 102.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

Communication & Information Design (CID)

CID 103 Speaking & Listening 3(3-0)
As Needed.
Introduces principles of speaking and listening with emphasis on exposition and its application to public speaking.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: H)

CID 204 (ENG 204) Introduction to Rhetoric 3(3-0)
As Needed.
Provides an introduction to the rhetorical tradition in relationship to the needs of various cultural, technological, and professional contexts.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

CID 205 Introduction to User Experience 3(3-0)
Spring.
Course introduces the techniques and principles for measuring and improving the user's experience with digital documents, such as web pages and mobile applications.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CID 212 Rhetorical Persuasion & Argumentation 3(3-0)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CID 221 Interpersonal Communication (GT-SS3) 3(3-0)
As Needed.
The principles and skills of speaking, applied to informal speaking situations. Topics covered include openness, genuineness, and talking appropriately to people.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(GT-SS3)

CID 230 Document Design 3(3-0)
As Needed.
Course emphasizes the analysis, design, and creation of ethically sound and rhetorically effective print and digital documents.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CID 260 Language Acquisition & Linguistics 3(3-0)
As Needed.
Normal processes of development of language in children, growth of language, including structure, comprehension, use of oral and written language, other symbolic behavior.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CID 291 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CID 295 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CID 335 (WS 335) Gender & Communication 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: None.

CID 345 Intercultural Communication 3(3-0)
As Needed.
The purpose of this course is to explore Intercultural Communication with the intent to better understand and appreciate cultural differences.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CID 350 Communicating in Professions 3(3-0)
As Needed.
Introduces the basics of professional communication in the workplace. The course attends to both theory and practice in interpersonal, small group, organizational and intercultural communication.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing.

CID 376 User Experience Design 3(3-0)
Fall.
Course familiarizes students with the commonly accepted principles of design that influence how digital texts look and act.
Prerequisite: CID 205.
Corequisite: None.
Registration Information: None.

CID 377 Usability & User Experience 3(3-0)
Spring.
Course familiarizes students with the methods, techniques, and tools for collecting the data used to measure User Experience, specifically usability testing.
Prerequisite: CID 205.
Corequisite: None.
Registration Information: None.

CID 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CID 493 Seminar 3(3-0)
As Needed.
This course will synthesize skills learned in the minor exposing students to theories and practices of communication training and development with an applied focus.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing.

CID 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CID 583 Contemporary Cultural Communication 3(3-0)
As Needed.
The purpose of this course is to explore Intercultural Communication with the intent to better understand and appreciate cultural differences.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

English (ENG)

ENG 101 Rhetoric & Writing I (GT-CO1) 3(3-0)
Fall, Spring, Summer.
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: None.
Corequisite: None.
Registration Information: None.
(GT-CO1)

ENG 102 Rhetoric & Writing II (GT-CO2) 3(3-0)
Fall, Spring, Summer.
Sequential course providing continued engagement with critical thinking, reading, argumentation, and using rhetorical techniques in academic writing. Emphasis on research strategies.
Prerequisite: ENG 101.
Corequisite: None.
Registration Information: ENG 101 must have earned a grade of C or better.
(GT-CO2)

ENG 106 (ANTH 106) Language, Thought and Culture 3(3-0)
As Needed.
Cross-cultural introduction to language processes in human society.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: SS) (CC)

ENG 114 Introduction to Creative Writing (GT-AH1) 3(3-0)
Fall, Spring.
An introduction to poetry, fiction, and creative non-fiction writing, stressing honest and clear writing and heightened critical thinking skills within a workshop setting.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH1) (CC)

ENG 115 Intro Tech Prof Writing GT-CO2 3(3-0)
Fall, Spring, Summer.
Course builds upon critical thinking, reading, and writing learned in ENG 101, with specific focus on the genre of technical communication and research.
Prerequisite: ENG 101.
Corequisite: None.
Registration Information: None.
(GT-CO2)

ENG 117 Intro. Scientific/Medical Writing (GT-CO2) 3(3-0)
Fall, Spring, Summer.
Course builds upon critical thinking, reading, and writing learned in ENG 101, with specific focus on the genre of scientific and medical communication and research.
Prerequisite: ENG 101.
Corequisite: None.
Registration Information: None.
(GT-CO2)

ENG 130 Introduction to Literature (GT-AH2) 3(3-0)
As Needed.
Introduction to the three major literary genres: fiction, poetry, and drama. The main emphasis is on close reading and textual analysis.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH2)

ENG 201 Introduction to Literary Theory (3 V)
As Needed.
Introduction to literary genres, major periods and writers, close reading and textual analysis, modern literary criticism, and research methods.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 204 (CID 204) Introduction to Rhetoric 3(3-0)
As Needed.
Provides an introduction to the rhetorical tradition in relationship to the needs of various cultural, technological, and professional contexts.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ENG 210 American Literature I 3(3-0)
As Needed.
Literature and literary history of America to 1865.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 212 American Literature II 3(3-0)
As Needed.
Literature and literary history of America from 1865 to the present.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 220 (CS 220) Survey of Chicano Literature (GT-AH2) 3(3-0)
As Needed.
Survey of outstanding contemporary Chicano works. Literature deals with Chicano themes, including analysis of folklore and myth.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH2) (CC)

ENG 221 Masterpieces of Literature I (GT-AH2) 3(3-0)
As Needed.
Significant writings in world literature from the ancients through the Renaissance and their backgrounds.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH2)

ENG 222 Masterpieces of Literature II (GT-AH2) 3(3-0)
As Needed.
Significant writings in world literature from the seventeenth century to the present and their backgrounds.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH2)

ENG 231 Literature of England I 3(3-0)
As Needed.
Literature and literary history of England from the Anglo-Saxon Period through the 18th Century.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 232 Literature of England II 3(3-0)
As Needed.
Literature and literary history of England in the Romantic, Victorian and Modern Periods.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 240 Multi-Ethnic American Literature (GT-AH2) (3 V)
As Needed.
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 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH2) (CC)

ENG 241 (WS 241) Women in Literature 3(3-0)
As Needed.
Intensive study of literature written by women, in historical, cultural, and critical contexts.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 291 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 302 Grant Writing 3(3-0)
As Needed.
Examines the strategies involved in professional grant writing. Students will produce and submit grant proposals in response to actual request for proposals.
Prerequisite: ENG 101 and ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 303 Advanced Rhetoric & Writing 3(3-0)
As Needed.
Advanced persuasive writing, including rhetoric and grammar.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 305 Technical and Scientific Report Writing 3(3-0)
As Needed.
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 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 306 Visual Rhetoric 3(3-0)
As Needed.
Rhetorical analysis through visual modes of communication; creation and manipulation of visual messages for a variety of audiences, purposes, situations.
Prerequisite: ENG 204.
Corequisite: None.
Registration Information: None.

ENG 310 Literary Forms & Genres (3 V)
As Needed.
Analyzes published writers, creative writing, and craft through writing based on the study and theory of a specified genre or form.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 315 Creative Writing: Poetry 3(3-0)
As Needed.
Introduction to writing poetry. A studio workshop for students to grow in their appreciation of poetic processes.
Prerequisite: ENG 114.
Corequisite: None.
Registration Information: None.

ENG 316 Creative Writing: Fiction 3(3-0)
As Needed.
Introduction to creating character, situation, and overall structure, emphasis on imaginative and real-life portrayal.
Prerequisite: ENG 114.
Corequisite: None.
Registration Information: None.

ENG 317 Creative Nonfiction 3(3-0)
As Needed.
Introduction to writing the reflective essay.
Prerequisite: ENG 114.
Corequisite: None.
Registration Information: None.

ENG 318 Creative Writing: Drama 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

ENG 319 Professional Editing 3(3-0)
As Needed.
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 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 328 Contemporary Literature (3 V)
As Needed.
Advanced study of a focused topic in contemporary literature (genre, theme, or set of related texts), in historical, cultural, and critical contexts.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: None.

ENG 352 English Syntax and Usage 3(3-0)
As Needed.
English usage and language systems, emphasis on forms and functions of language analysis.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ENG 360 Historical Perspectives in American Literature 3(3-0)
As Needed.
Advanced study of a focused topic in American literature, (genre, theme, or set of related texts), in historical, cultural, and critical contexts.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: Repeatable (12).

ENG 361 Historical Perspectives in Western Literature 3(3-0)
As Needed.
Advanced study of a focused topic in Western literature (genre, theme, or set of related texts), in historical, cultural, and critical contexts.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: Repeatable (12).

ENG 362 Historical Perspectives in Non-Western Literature (3 V)
As Needed.
Advanced study of a focused topic in Non-Western literature (genre, theme, or set of related texts), in historical, cultural, and critical contexts.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: Repeatable (12).

ENG 412 Young Adult Literature 3(3-0)
As Needed.
Literature suitable for adolescents, including classical and contemporary authors, and issues in selection and evaluation.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 414 Advanced Creative Writing Workshop 3(3-0)
As Needed.
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 or ENG 316 or ENG 317 or ENG 318.
Corequisite: None.
Registration Information: None.

ENG 441 Chaucer and His Age 3(3-0)
As Needed.
Chaucer and his contemporaries in their cultural and historical setting.
Prerequisite: ENG 201 or ENG 102 and HIST 102.
Corequisite: None.
Registration Information: None.

ENG 445 Magazine Editing and Production 3(3-0)
As Needed.
Writing, editing, and design for printing and Web publication of a general-circulation regional magazine.
Prerequisite: ENG 440 or MC 304 or 311 or 440.
Corequisite: None.
Registration Information: Permission of the instructor.

ENG 481 Shakespeare 3(3-0)
As Needed.
Representative works in various genres, with attention to cultural and critical contexts.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: None.

ENG 484 Studies in Major Writers 3(3-0)
As Needed.
Intensive study of a major writer or writers in historical, cultural, and critical contexts.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 485 Literary Criticism and Theory 3(3-0)
As Needed.
Traditional and contemporary critical theories of literature and their applications.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: None.

ENG 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 492 Research 3(3-0)
As Needed.
Introduces theory and methods of conducting research in rhetoric and literary studies.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: None.

ENG 493 Senior Seminar 3(3-0)
As Needed.
In-depth analysis of specific topics, themes, authors, and works in American, English or world literature.
Prerequisite: ENG 485.
Corequisite: None.
Registration Information: None.

ENG 494 Field Experience (1-5 V)
As Needed.
A semester-long internship. Student performs professional duties using English-related skills required by the cooperating agencies.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 495 Independent Study (1-3 V)
As Needed.
Directed, intensive study and guidance in studying major literary figures or movements, arranged with the chair of the department.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 501 Theories of Writing 3(3-0)
Fall.
Provides an introduction to and survey of modern writing theory. The course prepares students to apply theoretical principles to the practical concerns of writing pedagogy.
Prerequisite: None.
Corequisite: ENG 502.
Registration Information: None.

ENG 502 Research Methods 3(3-0)
Fall.
Introduces students to diverse opportunities for research methodology and academic discourse in English studies.
Prerequisite: None.
Corequisite: ENG 501.
Registration Information: None.

ENG 503 Literary Theory 3(3-0)
Spring.
An introduction to contempory literary and critical theory in English studies.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: None.

ENG 511 Major Authors 3(3-0)
As Needed.
Intensive study of the works of one or two major authors.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 512 Literature Survey 3(3-0)
As Needed.
Synthesis of literary attitudes, modes, genres of an age.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 522 Phonology & Morphology For ESL/EFL 3(3-0)
As Needed.
Introduction to English phonology, morphology, and morpho-syntax relevant to ESL/EFL teaching.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: None.

ENG 523 (CLDE 523) Syntax for TESL/TEFL 3(3-0)
As Needed.
Introduction to English syntactic structures relevant to ESL/EFL teaching. Includes an examination of core English structures from various perspectives.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ENG 525 Foundations of Technical Comm. 3(3-0)
As Needed.
Exploration of the theories, research methodologies, pedagogy, and practices of technical communication.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ENG 527 Graduate Creative Writing Workshop (3 V)
As Needed.
Group discussion of original student work, emphasizing plot, characterization, style, structure, theory, and other creative writing elements.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 530 (CLDE 530) Language Acquisition & Linguistics 3(3-0)
As Needed.
Development of English language from childhood through adulthood, including phonology, grammar, vocabulary, and communicative competence. Acquisition of English as a second language.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ENG 553 (CLDE 553) Language in the USA 3(3-0)
As Needed.
Explores language use in the U.S. and examines current language-related myths and issues in the U.S., including issues related to indigenous languages and immigrant languages.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ENG 578 Workshop in the Teaching of Writing 3(3-0)
As Needed.
Theories of composition, methods, sources and resources for teachers of writing.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

ENG 589 Directed Study for MA Exams 3(3-0)
As Needed.
Directed study with student's advisor to prepare for taking MA exams that semester.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate Standing and permission of instructor. Repeatable (6).

ENG 591 Special Topics 3(3-0)
As Needed.
Varied topics covering cultural or historical areas, or literacy and discourse theory and practice, or professional pedagogical issues.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 594 Field Experience 3(3-0)
As Needed.
Designed to prepare students for, and support them through their first semester as a teaching assistant at CSUP.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: Approval of instructor. Repeatable (99).

ENG 595 Independent Study (1-5 V)
As Needed.
Students will work with a professor in the department in order to create a rigorous course schedule on a topic of their choosing.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: Approval of instructor. Repeatable (99).

ENG 598 Internship (1-5 V)
As Needed.
Students who have sought and received an internship in the field of English Studies will work with their advisor in order to set expectations.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: Approval of instructor. Repeatable (99).

ENG 599 Thesis Research 3(3-0)
As Needed.
Thesis Research.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: Approval of instructor. Repeatable (6).

French (FRN)

FRN 101 Beginning French I (3 V)
Fall, Even.
Development of skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

FRN 102 Beginning French II (3 V)
Spring, Even.
Continuation of the development of skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: FRN 101.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H) (CC)

FRN 201 Intermediate French I (GT-AH4) 3(3-0)
As Needed.
Development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: FRN 102.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H, GT-AH4) (CC)

FRN 202 Intermediate French II (GT-AH4) 3(3-0)
As Needed.
Continued development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: FRN 201.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H, GT-AH4) (CC)

FRN 287 Intensive French Study Abroad (1-9 V)
As Needed.
Study of French in an immersion setting abroad, preparing the student for fluency through the study of grammar, civilization and culture, at an approved institution.
Prerequisite: FRN 102.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (9).

FRN 294 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: FRN 201.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (7).

FRN 301 Advanced French Grammar 3(3-0)
As Needed.
A concentrated study of French grammar in addition to practice in writing, reading, speaking, and listening.
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.

FRN 303 French Phonetics and Diction 3(2-2)
As Needed.
French pronunciation: theory, correction and practice of diction and intonation. Phonetic transcription and practical exercises.
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: Permission of instructor.

FRN 312 Conv & Comp: Europe 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of French-speaking countries and regions in Europe. (Culture, History, Literature, Art, Gastronomy, Current Events, etc).
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: None.

FRN 313 Conv & Comp: Africa & Caribbean 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of Francophone cultures in Africa and the Caribbean. (Culture, History, Literature, Art, Gastronomy, Current Events, etc).
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: None.

FRN 314 Conv & Comp: North America 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of Francophone cultures in the U.S. and Canada. (Culture, History, Literature, Art, Gastronomy, Current Events, etc).
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: None.

FRN 341 French through Literature 3(3-0)
As Needed.
Focus on improving linguistic proficiency (reading, writing, listening and speaking) through the study of literary works from France and the Francophone World.
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: Permission of instructor.

FRN 351 French through Film 3(3-0)
As Needed.
Focus on improving linguistic proficiency (reading, writing, listening and speaking) through the study cinema of the French and Francophone World.
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: None.

FRN 381 French Civ: France 3(3-0)
As Needed.
Focus on improving linguistic proficiency through the study of french history. Students will engage with literary, historic and filmic texts.
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: Permission of instructor.

FRN 382 French Civ: Francophone World 3(3-0)
As Needed.
Focus on improving linguistic proficiency through study of history and contemporary events affecting the francophone world. Students will engage with literary, historic and filmic texts.
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: Permission of instructor.

FRN 387 Intensive French Study Abroad (1-12 V)
As Needed.
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: FRN 201.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

FRN 391 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: Repeatable (9).

FRN 394 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (7).

FRN 494 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: None.
Corequisites: None.
Registration Information: Two years college French. Repeatable (99).

FRN 495 Independent Study 1-3(1-3-1-3)
As Needed.
Specific themes which address particular problems of literature or civilization.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

German (GER)

GER 101 Beginning German I 3(3-0)
Fall, Even.
Development of skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

GER 102 Beginning German II 3(3-0)
Spring, Even.
Continuation of the development of skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: GER 101.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H) (CC)

GER 201 Intermediate German I 3(3-0)
As Needed.
Development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: GER 102.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H) (CC)

GER 202 Intermediate German II 3(3-0)
As Needed.
Continued development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: GER 201.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H) (CC)

GER 301 Advanced German Grammar 3(3-0)
As Needed.
A concentrated study of German grammar in addition to practice in writing, reading, speaking, and listening.
Prerequisite: GER 202.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.

GER 303 Conv And Comp: German 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of German culture.
Prerequisite: GER 202.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.

GER 381 German Civilization I 3(3-0)
As Needed.
German geography, culture and history from the beginning to the present.
Prerequisite: GER 202.
Corequisites: None.
Registration Information: Permission of instructor.

GER 382 German Civilization II 3(3-0)
As Needed.
German Civilization II.
Prerequisite: GER 202.
Corequisites: None.
Registration Information: Permission of instructor.

Italian (ITL)

ITL 101 Beginning Italian I 3(3-0)
Fall, Spring, Even.
Development of skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

ITL 102 Beginning Italian II 3(3-0)
Fall, Spring, Even.
Continuation of the development of skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: ITL 101.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H) (CC)

ITL 201 Intermediate Italian I (GT-AH4) 3(3-0)
Fall.
Development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: ITL 102.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H, GT-AH4) (CC)

ITL 202 Intermediate Italian II (GT-AH4) 3(3-0)
Spring, Even.
Continued development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: ITL 201.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H, GT-AH4) (CC)

ITL 287 Intensive Italian Study Abroad (1-9 V)
As Needed.
Study of Italian in an immersion setting abroad, preparing the student for fluency through the study of grammar, civilization and culture, at an approved institution.
Prerequisite: ITL 102.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (9).

ITL 294 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: ITL 201.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (7).

ITL 295 Independent Study (1-3 V)
As Needed.
Focus on increasing linguistic proficiency through an independent project or agreed upon plan of study that relates to the Italian-speaking world.
Prerequisites: ITL 102.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (6).

ITL 301 Advanced Italian Grammar 3(3-0)
As Needed.
A concentrated study of Italian grammar in addition to practice in writing, reading, speaking, and listening.
Prerequisite: ITL 202.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.

ITL 312 Conv and Comp: Italian 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of Italian culture. (Culture, History, Literature, Art, Gastronomy, Current Events, etc).
Prerequisite: ITL 202.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.

ITL 341 Italian through Literature 3(3-0)
As Needed.
Focus on improving linguistic proficiency (reading, writing, listening and speaking) through the study of Italy's rich literary legacy.
Prerequisite: ITL 202.
Corequisites: None.
Registration Information: None.

ITL 351 Italian through Film 3(3-0)
As Needed.
Focus on improving linguistic proficiency (reading, writing, listening and speaking) through the study of Italian cinema.
Prerequisite: ITL 202.
Corequisites: None.
Registration Information: None.

ITL 381 Italian Civilization 3(3-0)
As Needed.
Focus on improving linguistic proficiency through the study of Italian geography, culture and history from the Roman Empire to the present.
Prerequisite: ITL 202.
Corequisites: None.
Registration Information: Permission of instructor.

ITL 387 Intensive Italian Study Abroad (1-12 V)
As Needed.
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: ITL 201.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

ITL 391 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: ITL 202.
Corequisites: None.
Registration Information: Repeatable (9).

ITL 394 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: ITL 202.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (7).

ITL 395 Independent Study (1-3 V)
As Needed.
Focus on increasing linguistic proficiency through an independent project or agreed upon plan of study that relates to the Italian-speaking world.
Prerequisites: ITL 202.
Corequisites: None.
Registration Information: Permission of instructor.

ITL 494 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: None.
Corequisites: None.
Registration Information: Two years of college Italian. Repeatable (99).

ITL 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

Spanish (SPN)

SPN 100 Intro to Conversational Spanish 3(3-0)
As Needed.
Basis skills for understanding and speaking Spanish.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SPN 101 Beginning Spanish I 3(3-0)
Fall, Spring, Even.
Development of skills in speaking, listening, reading, writing; and cultural understanding.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

SPN 102 Beginning Spanish II 3(3-0)
Fall, Spring, Even.
Continuation of the development of skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: SPN 101.
Corequisites: None.
Registration Information: Placement exam required for prerequisite equivalents.
(Gen Ed: H) (CC)

SPN 130 Intro to Spanish-Speaking Cultures 3(3-0)
As Needed.
Topics in the history, literatures, and art of selected Spanish-Speaking cultures, with an intro to basic Spanish. Taught in English and Spanish.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

SPN 201 Intermediate Spanish I (GT-AH4) 3(3-0)
Fall, Spring, Even.
Development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: SPN 102.
Corequisites: None.
Registration Information: Placement exam required for prerequisite equivalents.
(Gen Ed: H, GT-AH4) (CC)

SPN 202 Intermediate Spanish II (GT-AH4) 3(3-0)
Fall, Even.
Continued development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: SPN 102.
Corequisites: None.
Registration Information: Placement exam required for prerequisite equivalents.
(Gen Ed: H, GT-AH4) (CC)

SPN 203 Intermediate Proficiency Building (3 V)
Spring, Even.
Solidification of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: SPN 102.
Corequisites: None.
Registration Information: Placement exam required for prerequisite equivalents.

SPN 205 Basic Spanish for Health Professions 3(3-0)
Summer.
Focus on improving linguistic and cultural proficiency through the study of basic Spanish for healthcare, and cultural approaches for the field.
Prerequisites: SPN 101 and SPN 102.
Corequisites: None.
Registration Information: Placement may substitute prerequisites.

SPN 287 Intensive Spanish Study Abroad (1-9 V)
As Needed.
Study of Spanish in an immersion setting abroad, preparing the student for fluency through the study of grammar, civilization and culture, at an approved institution.
Prerequisite: SPN 102.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (9).

SPN 294 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: SPN 201.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (7).

SPN 295 Independent Study (1-3 V)
As Needed.
Focus on increasing linguistic proficiency through an independent project or agreed upon plan of study that relates to the Spanish-speaking world.
Prerequisite: SPN 102.
Corequisites: None.
Registration Information: Permission of instructor.

SPN 301 Spanish Grammar in Context 3(3-0)
Fall, Spring, Even.
Practice of Spanish grammar in the context of writing, reading, speaking and listening.
Prerequisite: SPN 201 and SPN 202 and SPN 203.
Corequisites: None.
Registration Information: None.

SPN 303 Spanish Phonetics & Phonology (3 V)
Fall, Spring, Even.
Focus on improving linguistic proficiency through the study of the Spanish language sound system.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 309 Intro to Hispanic Linguistics 3(3-0)
As Needed.
Focus on improving linguistic proficiency through the study of areas of inquiry including history of Spanish, first and second language acquisition, bilingualism, language variation, etc.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 312 Conv & Comp: Mexico & Central Amer 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of Mexican and Central American cultures.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 313 Conv & Comp: South America 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of South American cultures.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 314 Conv & Comp: Caribbean 3(3-0)
As Needed.
Focus on improving linguistic proficiency with the context of Caribbean Hispanic cultures.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 315 Conv & Comp: Spain 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of Spanish cultures.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 316 Conv & Comp: U.S. Latinx 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of Hispanix/Latinx cultures in the United States.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 317 Conversation & Composition: Topics (3 V)
As Needed.
Focus on improving linguistic proficiency within the context of discussing topics pertinent to the Spanish-speaking world.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 318 Conversation & Composition: Spanish Language Films 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of Spanish language films.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 331 Business: SPN Speaking World 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through the study and exploration of the Hispanic business world.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 332 Health/Wellbeing: SPN Speaking Wrld 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through the study topics about health and wellbeing in the Spanish-speaking world.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 341 Intro to Translation/Interpretation 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through the study and practice of translation and interpretation.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 342 Intermediate Translation Practicum 1-3(0-1-3)
As Needed.
Focus on improving intermediate high to advanced low linguistic and cultural proficiency through practical experience in various aspects of translation work.
Prerequisites: SPN 441.
Corequisites: None.
Registration Information: Intermediate proficiency level in Spanish required. Repeatable (6).

SPN 370 Intro to Literature & Culture (3 V)
As Needed.
Focus on improving linguistic proficiency through the study of basic concepts necessary for analysis of literature, film, music, art, media, etc in the Spanish-Speaking World.
Prerequisite: SPN 301.
Corequisites: None.
Registration Information: Permission of instructor.

SPN 387 Intensive Spanish Study Abroad (1-12 V)
As Needed.
Study of Spanish in an immersion setting abroad preparing the student to become fluent in the language through the study of grammar, civilization and culture.
Prerequisite: SPN 201 and SPN 202 and SPN 203.
Corequisites: None.
Registration Information: Repeatable (12).

SPN 391 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: Repeatable (9).

SPN 394 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: SPN 201 and SPN 202 and SPN 203.
Corequisites: None.
Registration Information: Repeatable (7).

SPN 395 Independent Study (1-3 V)
As Needed.
Focus on increasing linguistic proficiency through an independent project or agreed upon plan of study that relates to the Spanish-speaking world.
Prerequisite: SPN 201 and SPN 202 and SPN 203.
Corequisites: None.
Registration Information: None.

SPN 412 Cultural Studies: Mexico/Central Am 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of cultural products, values, and belief systems as they pertain to relationships of power in Mexico/Central America.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 413 Cultural Studies: South America 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of cultural products, values, and belief systems as they pertain to relationships of power in South America.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 414 Cultural Studies: Caribbean 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of cultural products, values, and belief systems as they pertain to relationships of power in the Spanish Caribbean.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 415 Cultural Studies: Spain 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of cultural products, values, and belief systems as they pertain to relationships of power in Spain.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 416 Cultural Studies: U.S. Latinx 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of cultural products, values, and belief systems as they pertain to relationships of power in U.S.A. Latinx culture.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 417 Topics in Cultural Studies 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of cultural products, values, and belief systems as they pertain to relationships of power throughout the Spanish-speaking world.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 430 Topics in Literature 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of selected works, themes, genres or periods in literature. Taught in Spanish.
Prerequisites: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 441 Advanced Translation 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through the advanced, focused study and practice of translation.
Prerequisites: SPN 370 or SPN 341.
Corequisites: None.
Registration Information: Permission of instructor.

SPN 442 Advanced Translation Practicum 1-3(0-1-3)
As Needed.
Focus on improving advanced to superior linguistic and cultural proficiency through practical experience in various aspects of translation work.
Prerequisites: SPN 441.
Corequisites: None.
Registration Information: Intermediate high proficiency level needed. Repeatable (6).

SPN 462 Representations of Migration 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through the study of how migration is represented in the Spanish-speaking world through art, music, literature, film, media, etc.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 463 Representations of Gender 3(3-0)
As Needed.
Focus on improving linguistic proficiency through the critical study of how gender is represented in art, music, literature, film, media, etc.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 464 Politics & Power 3(3-0)
As Needed.
Focus on improving linguistic proficiency through the critical study of politics and power in the Spanish-speaking world, and how it is represented in art, music, literature, film, media, etc.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 481 Cinema of Spain 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through the critical study of selected Spanish films and their historical context.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 482 Cinema of Latin America 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through the critical study of selected Latin American films and their historical context.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: Repeatable (99).

SPN 493 Senior Seminar 3(3-0)
As Needed.
In-depth analysis of specific topics, themes, authors, and works in the language literatures and cultures of the Spanish-speaking world.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 494 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: Repeatable (99).

SPN 495 Independent Study (1-3 V)
As Needed.
Focus on increasing linguistic proficiency through an independent project or agreed upon plan of study that relates to the Spanish speaking world .
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: Repeatable (99).

SPN 501 Spanish Grammar in Context 3(3-0)
As Needed.
Practice of Spanish Grammar in the context of writing, reading, speaking and listening.
Prerequisite: None.
Corequisites: None.
Registration Information: Graduate Standing.

SPN 517 Topics in Cultural Studies 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of cultural products, values, and belief systems as they pertain to relationships of power throughout the Spanish-speaking world.
Prerequisite: None.
Corequisites: None.
Registration Information: Graduate Standing.

SPN 534 Topics in Literature 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of selected works, themes, genres or periods from the Spanish-speaking world.
Prerequisite: None.
Corequisites: None.
Registration Information: Graduate Standing.

SPN 591 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisites: None.
Registration Information: Graduate Standing. Repeatable (9).

SPN 595 Independent Study (1-3 V)
As Needed.
Focus on increasing linguistic proficiency through an independent project or agreed upon plan of study that relates to the Spanish-speaking world.
Prerequisite: None.
Corequisites: None.
Registration Information: Graduate Standing. Repeatable (9).

World Languages (WL)

WL 100 Intro to Comparative Linguistics 3(3-0)
As Needed.
Basic concepts in linguistics; comparison of languages.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

WL 101 Intro to a Critical Wrld Language I 3(3-0)
As Needed.
Study of a world language not offered regularly. Different languages are offered when enrollment permits.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (6).
(Gen Ed: H) (CC)

WL 102 Intro to a Critical Wrl Language II 3(3-0)
As Needed.
Introduction to a Critical World Language II.
Prerequisite: WL 101.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (6).
(Gen Ed: H) (CC)

WL 110 World Language for Travel 1(1-0)
As Needed.
Fundamental vocabulary for basic tourist communication.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WL 291 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

WL 294 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

WL 394 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

WL 494 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

WL 495 Independent Study (1-3 V)
As Needed.
Focus on increasing linguistic proficiency through an independent project or agreed upon plan of study that relates to the target language.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

WL 591 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisites: None.
Registration Information: Graduate standing. Repeatable (99).

WL 594 Field Experience (1-9 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: None.
Corequisites: None.
Registration Information: Graduate standing. Repeatable (9).

WL 595 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisites: None.
Registration Information: Graduate standing. Repeatable (9).

Advanced Spanish for the Health Professions, Certificate

Specific Admission Requirements

Students entering the Advanced Spanish for the Health Professions Certificate must have intermediate Spanish proficiency to be admitted. Students will have to complete a Modified Oral Proficiency Interview (MOPI) to determine their level.

Student Learning Outcomes

Students will achieve an advanced level of proficiency in Spanish communication skills (listening, speaking, reading, and writing) and an advanced degree in the understanding of Hispanic cultures sufficient to allow them to function effectively in health professions

These outcomes will be achieved by focusing on the 5 C's:

Communication: Students can communicate effectively in oral and written form, interpret messages, show cultural understanding when they communicate, and present oral and written information to various audiences for a variety of situations and purposes in health professions.

Cultures: Students can interact with cultural competence and understanding by becoming attuned to Latinx cultures in the U.S. and beyond. They use the language to investigate, explain, and reflect on the practices, products and perspectives of Latinx cultures in the health fields.

Connections: Students are able to connect their knowledge and understanding of Spanish-language and Latinex cultures to the field of health.

Comparisons: Students are able to compare and contrast Spanish language and cultures with other languages and cultures in the U.S in order to act with intercultural competence. They discover patterns, make predictions, and analyze similarities and differences.

Communities: Students form a community of practice around serving Spanish speakers in the health professions. They can participate directly in Latinex communities and interact with advanced linguistic and cultural competence.

Specific Program Requirements

Course	Title	Credits
SPN 205	Basic Spanish for Health Professions	3
SPN 332	Health/Wellbeing: SPN Speaking Wrld	3
Take one 3 credit course from the following:		**3**
SPN 301	Spanish Grammar in Context	3
SPN 309	Intro to Hispanic Linguistics	3
SPN 312	Conv & Comp: Mexico & Central Amer	3
SPN 314	Conv & Comp: Caribbean	3
SPN 316	Conv & Comp: U.S. Latinx	3
SPN 318	Conversation & Composition: Spanish Language Films	3
SPN 341	Intro to Translation/Interpretation	3
SPN 387	Intensive Spanish Study Abroad	1-12
SPN 394	Field Experience	1-7
Take one 3 credit course from the following:		**3**
HS 320	Evaluation of Health Issues	3
HS 336	Community and Global Health	3
MAE 210	Hispanic, Chicanx, & Indigenous Media	3
POLS 340	Public Policy	3
PSYC 105	Understanding Human Diversity	3
PSYC 212	Psychology of Diversity	3
SOC 201	Social Problems (GT-SS1)	3

SOC 252	Understanding Lived Experiences	3
SOC 315	Health, Culture, and Society	3
SOC 324	Race & Ethnic Relation	3
SW 320	Human Diversity in Practice	3
Total Credits		**12**

Basic Spanish for the Health Professions, Certificate

Specific Admission Requirements

Students entering the Basic Spanish for the Health Professions Certificate must have little to no experience with the language

Student Learning Outcomes

Students will achieve a basic level of proficiency in Spanish communication skills (listening, speaking, reading, and writing) and an advanced degree in the understanding of Hispanic cultures sufficient to allow them to function effectively in health professions

These outcomes will be achieved by focusing on the 5 C's:

Communication: Students can communicate at a basic level in oral and written form, interpret basic messages, show cultural understanding when they communicate, and present basic oral and written information to limited audiences.

Cultures: Students can interact with cultural competence and understanding by becoming attuned to Latinx cultures in the U.S. and beyond. They can investigate, explain, and reflect on the practices and perspectives of Latinx cultures in the health fields.

Connections: Students are able to connect their knowledge and understanding of Spanish-language and Latinex cultures to the field of health.

Comparisons: Students are able to compare and contrast Spanish language and cultures with other languages and cultures in the U.S in order to act with intercultural competence. They discover patterns, make predictions, and analyze similarities and differences.

Communities: Students form a community of practice around serving Spanish speakers in the health professions. They can participate directly in Latinex communities and interact with basic linguistic competence and advanced cultural competence.

Specific Program Requirements

Course	Title	Credits
SPN 101	Beginning Spanish I	3
SPN 102	Beginning Spanish II	3
SPN 205	Basic Spanish for Health Professions	3
Take one 3 credit course from the following:		**3**
HS 320	Evaluation of Health Issues	3
HS 336	Community and Global Health	3
MAE 210	Hispanic, Chicanx, & Indigenous Media	3
POLS 340	Public Policy	3
PSYC 105	Understanding Human Diversity	3
PSYC 212	Psychology of Diversity	3
SOC 201	Social Problems (GT-SS1)	3
SOC 252	Understanding Lived Experiences	3
SOC 315	Health, Culture, and Society	3
SOC 324	Race & Ethnic Relation	3
SW 320	Human Diversity in Practice	3
Total Credits		**12**

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

1. Demonstrate fluency in literary history, cultural contexts, and current issues in English studies.
2. Conduct, analyze, evaluate, and integrate academic research and theory.
3. Employ critical and rhetorical theory to analyze and interpret texts.
4. Construct persuasive and reasonable arguments, using a range of rhetorical strategies.
5. Analyze literary and non-literary texts and synthesize ideas with clarity, accuracy, and coherence.

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 record student and former student publications, reporting the result annually, specifically in English 114 and English 414 courses.

Special Program Requirements

Course	Title	Credits
Required Core Courses		**9**
ENG 114	Introduction to Creative Writing (GT-AH1) (to be taken at the start of the minor)	3
ENG 201	Introduction to Literary Theory	3
ENG 414	Advanced Creative Writing Workshop (to be taken at the end of the minor)	3
Writing and Practice (Select two courses.)		**6**
ENG 310	Literary Forms & Genres	3
ENG 315	Creative Writing: Poetry	3
ENG 316	Creative Writing: Fiction	3
ENG 317	Creative Nonfiction	3
ENG 318	Creative Writing: Drama	3
ENG 319	Professional Editing	3
Development and Impact (Select one course.)		**3**
CID 350	Communicating in Professions	3
ENG 445	Magazine Editing and Production	3
Elective Courses (Select one course) [1]		**3**
ENG 204	Introduction to Rhetoric	3
ENG 220	Survey of Chicano Literature (GT-AH2)	3

ENG 240	Multi-Ethnic American Literature (GT-AH2)	3
ENG 241	Women in Literature	3
ENG 306	Visual Rhetoric	3
ENG 328	Contemporary Literature	3
ENG 352	English Syntax and Usage	3
ENG 412	Young Adult Literature	3
ENG 484	Studies in Major Writers	3
ENG 492	Research	3
ENG 494	Field Experience	1
ENG 485	Literary Criticism and Theory	3
ENG 491	Special Topics	1
CS 341	Chicana Writers	3
WS 341	Chicana Writers	3
MAE 211	Women & Media	3
MAE 305	Scriptwriting	3
Total Credits		**30**

[1] Courses used to fulfill requirements above cannot be used for elective credit.

English, Bachelor of Arts

The BA in English provides students with foundational knowledge in literature, writing and practice, critical thinking, literary theory, culture and diversity, and the power of language that will empower them to innovate, communicate, and discover the necessary skills to thrive in their professional career paths and serve their community.

Student Learning Outcomes

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

1. Demonstrate fluency in literary history, cultural contexts, and current issues in English studies.
2. Conduct, analyze, evaluate, and integrate academic research and theory.
3. Employ critical and rhetorical theory to analyze and interpret texts.
4. Construct persuasive and reasonable arguments, using a range of rhetorical strategies.
5. Analyze literary and non-literary texts and synthesize ideas with clarity, accuracy, and coherence.

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.
- All English majors begin the program with ENG 201 Introduction to Literary Theory (3 c.h.) which establishes the emphasized professional standards and the writing and analytical skills students will have acquire in the program. All students in ENG 201 write a final paper, one copy of which is submitted to the department chairperson or committee for assessment.
- All English majors take ENG 493 Senior Seminar (3 c.h.) emphasizing professional standards and synthesizing the writing and analytical skills students have acquired in other English classes. All students in ENG 493 write a senior research paper, one copy of which is submitted to the department chairperson for dissemination for review. In order to pass ENG 493, students must demonstrate satisfactory levels of achievement in meeting the program goals.
- English Program faculty review the papers from ENG 201 and ENG 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.

Specific Program Requirements

- Students should consult with an advisor in English prior to registration.
- All major courses must be completed with a C or better.
- Students must fulfill the University foreign language requirements for the BA degree: first year world language (6-8 credit hours), or ENG 106 & WL 100, or ASL 101 & ASL 102. International students are still required to complete the language requirements.
- For teaching endorsement requirements, see the Teacher Education Program section.

Specific Core Requirements

Course	Title	Credits
Required Courses	**Select two courses:**	**18**
ENG 114	Introduction to Creative Writing (GT-AH1)	3
ENG 201	Introduction to Literary Theory	3
ENG 204	Introduction to Rhetoric	3
ENG 414	Advanced Creative Writing Workshop	3
ENG 485	Literary Criticism and Theory	3
ENG 493	Senior Seminar	3
Culture & Diversity	**Select two courses:**	**6**
CID 335	Gender & Communication	3
ENG 106	Language, Thought and Culture	3
ENG 220	Survey of Chicano Literature (GT-AH2)	3
ENG 240	Multi-Ethnic American Literature (GT-AH2)	3
ENG 241	Women in Literature	3
Development & Impact	**Select two courses; one MUST be CID 350.**	**6**
CID 350	Communicating in Professions	3
ENG 115	Intro Tech Prof Writing GT-CO2	3
ENG 117	Intro. Scientific/Medical Writing (GT-CO2)	3
ENG 319	Professional Editing	3
ENG 445	Magazine Editing and Production	3
ENG 492	Research	3
Literature in Historical Perspective	**Select one set of courses and one 300-level course.**	**9**
ENG 210 & ENG 212	American Literature I and American Literature II	6

ENG 221 & ENG 222	Masterpieces of Literature I (GT-AH2) and Masterpieces of Literature II (GT-AH2)	6
ENG 231 & ENG 232	Literature of England I and Literature of England II	6
ENG 328	Contemporary Literature	3
ENG 360	Historical Perspectives in American Literature	3
ENG 361	Historical Perspectives in Western Literature	3
ENG 362	Historical Perspectives in Non-Western Literature	3
Major Writers	**Select two courses; one MUST be ENG 481.**	**6**
ENG 441	Chaucer and His Age	3
ENG 481	Shakespeare	3
ENG 484	Studies in Major Writers	3
Writing & Practice	**Select three courses:**	**9**
ENG 310	Literary Forms & Genres	3
ENG 315	Creative Writing: Poetry	3
ENG 316	Creative Writing: Fiction	3
ENG 317	Creative Nonfiction	3
ENG 318	Creative Writing: Drama	3
ENG 491	Special Topics	1-3
Total Credits		**54**

Specific 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.

- 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.

English, Minor

The Minor in English provides students with foundational knowledge in literature, writing and practice, critical thinking, literary theory, culture and diversity, and the power of language that will empower them to innovate, communicate, and discover the necessary skills to thrive in their professional career paths and serve their community and complement their majors.

Learning Outcomes

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

1. Demonstrate fluency in literary history, cultural contexts, and current issues in English studies.
2. Conduct, analyze, evaluate, and integrate academic research and theory.
3. Employ critical and rhetorical theory to analyze and interpret texts.
4. Construct persuasive and reasonable arguments, using a range of rhetorical strategies.
5. Analyze literary and non-literary texts and synthesize ideas with clarity, accuracy, and coherence.

Special Program Requirements

Course	Title	Credits
Core Courses		
ENG 201	Introduction to Literary Theory	3
ENG 204	Introduction to Rhetoric	3
Literature (Select one course)		**3**
ENG 130	Introduction to Literature (GT-AH2)	3
ENG 210	American Literature I	3
ENG 212	American Literature II	3
ENG 221	Masterpieces of Literature I (GT-AH2)	3
ENG 222	Masterpieces of Literature II (GT-AH2)	3
ENG 231	Literature of England I	3
ENG 232	Literature of England II	3
ENG 328	Contemporary Literature	3
ENG 360	Historical Perspectives in American Literature	3
ENG 361	Historical Perspectives in Western Literature	3
ENG 362	Historical Perspectives in Non-Western Literature	3
ENG 441	Chaucer and His Age	3
ENG 481	Shakespeare	3
ENG 484	Studies in Major Writers	3
ENG 493	Senior Seminar	3
Writing and Practice		**3**
ENG 114	Introduction to Creative Writing (GT-AH1)	3
ENG 303	Advanced Rhetoric & Writing	3
ENG 305	Technical and Scientific Report Writing	3
ENG 306	Visual Rhetoric	3
ENG 310	Literary Forms & Genres	3
ENG 315	Creative Writing: Poetry	3
ENG 316	Creative Writing: Fiction	3
ENG 317	Creative Nonfiction	3
ENG 318	Creative Writing: Drama	3
ENG 319	Professional Editing	3
ENG 352	English Syntax and Usage	3
CID 376	User Experience Design	3
CID 377	Usability & User Experience	3
ENG 412	Young Adult Literature	3
ENG 414	Advanced Creative Writing Workshop	3
ENG 445	Magazine Editing and Production	3
ENG 491	Special Topics	1-3
Culture and Diversity		**3**
ENG 106	Language, Thought and Culture	3
ENG 220	Survey of Chicano Literature (GT-AH2)	3
ENG 240	Multi-Ethnic American Literature (GT-AH2)	3
ENG 241	Women in Literature	3
CID 335	Gender & Communication	3
CID 345	Intercultural Communication	3
CS 341	Chicana Writers	3
WS 341	Chicana Writers	3
Elective		**3**

Note: 9 credits must be upper division courses.	
Total Credits	**27**

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 and one must be ENG 201 Introduction to Literary Theory (3 c.h.). 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

English: 7-12 Teacher Preparation Concentration, Bachelor of Arts

The BA in English with a Minor in Secondary Teaching Endorsement provides students with foundational knowledge in literature, writing and practice, critical thinking, literary theory, culture and diversity, and the power of language that will empower them to innovate, communicate, and discover the necessary skills to thrive in their professional career paths and serve their community. Students will also works closely with the Teacher Education Program to gain the experience and necessary skills to thrive, lead, and innovate in the classroom.

Student Learning Outcomes

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

1. Demonstrate fluency in literary history, cultural contexts, and current issues in English studies.
2. Conduct, analyze, evaluate, and integrate academic research.
3. Employ critical and rhetorical theory to analyze and interpret texts.
4. Construct persuasive and reasonable arguments, using a range of rhetorical strategies.
5. Analyze literary and non-literary texts and synthesize ideas with clarity, accuracy, and coherence.

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.
- All English majors begin the program with ENG 201 Introduction to Literary Theory (3 c.h.) which establishes the emphasized professional standards and the writing and analytical skills students will have acquire in the program. All students in ENG 201 write a final paper, one copy of which is submitted to the department chairperson or committee for assessment.
- All English majors take a ENG 493 Senior Seminar (3 c.h.) emphasizing professional standards and synthesizing the writing and analytical skills students have acquired in other English classes. All students in ENG 493 write a senior research paper, one copy of which is submitted to the department chairperson for dissemination for review. In order to pass ENG 493, students must demonstrate satisfactory levels of achievement in meeting the program goals.
- English Program faculty review the papers from ENG 201 and ENG 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.

Specific Program Requirements

- Students should consult with an advisor in English prior to registration.
- All major courses must be completed with a C or better.
- Students must fulfill the University foreign language requirements for the BA degree: first year world language (6-8 credit hours), or ENG 106 & WL 100, or ASL 101 & ASL 102. International students are still required to complete the language requirements.
- For teaching endorsement requirements, see the Teacher Education Program section.
- **Students completing a major in English with Secondary Teaching Endorsement are required to complete a minor in education and meet all other requirements outlined by the Teacher Education Program.**

Specific Core Requirements

Course	Title	Credits
Required Courses	**Select two courses:**	**18**
ENG 114	Introduction to Creative Writing (GT-AH1)	3
ENG 201	Introduction to Literary Theory	3
ENG 204	Introduction to Rhetoric	3
ENG 414	Advanced Creative Writing Workshop	3
ENG 485	Literary Criticism and Theory	3
ENG 493	Senior Seminar	3
Culture & Diversity	**Select two courses:**	**6**
CID 335	Gender & Communication	3
ENG 106	Language, Thought and Culture	3
ENG 220	Survey of Chicano Literature (GT-AH2)	3
ENG 240	Multi-Ethnic American Literature (GT-AH2)	3
ENG 241	Women in Literature	3
Development & Impact	**Select two courses; one MUST be CID 350.**	**6**
CID 350	Communicating in Professions	3
ENG 115	Intro Tech Prof Writing GT-CO2	3
ENG 117	Intro. Scientific/Medical Writing (GT-CO2)	3
ENG 319	Professional Editing	3
ENG 445	Magazine Editing and Production	3
ENG 492	Research	3
Literature in Historical Perspective	**Select one set of courses and one 300-level course.**	**9**
ENG 210 & ENG 212	American Literature I and American Literature II	6
ENG 221 & ENG 222	Masterpieces of Literature I (GT-AH2) and Masterpieces of Literature II (GT-AH2)	6
ENG 231 & ENG 232	Literature of England I and Literature of England II	6

ENG 328	Contemporary Literature	3
ENG 360	Historical Perspectives in American Literature	3
ENG 361	Historical Perspectives in Western Literature	3
ENG 362	Historical Perspectives in Non-Western Literature	3
Major Writers	**Select two courses; one MUST be ENG 481.**	**6**
ENG 441	Chaucer and His Age	3
ENG 481	Shakespeare	3
ENG 484	Studies in Major Writers	3
Writing & Practice	**Select three courses:**	**9**
ENG 310	Literary Forms & Genres	3
ENG 315	Creative Writing: Poetry	3
ENG 316	Creative Writing: Fiction	3
ENG 317	Creative Nonfiction	3
ENG 318	Creative Writing: Drama	3
ENG 491	Special Topics	1-3
Total Credits		**54**

Specific Concentration Requirement

In addition to the completion of the English Core Requirements students must also complete the following:

Course	Title	Credits
RDG 355	Linguistics for Educators	3

Specific Requirements for the Secondary and K-12 Teaching Endorsements/Minor

The student must complete an appropriate major and the following Education courses:

Course	Title	Credits
Select one of the following:		3
PSYC 151	Human Development (GT-SS3)	3
PSYC 251	Childhood and Adolescence	3
PSYC 342	Educational Psychology	3
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology [2]	3
ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
RDG 435	Disciplinary Literacy [3, 5]	4
Special Methods in Endorsement Areas (Prerequisites - Admission to Education) [5]		4
ED 412	Teaching Diverse Learners [4, 5]	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
or ED 489	Student Teaching K-12	
Total Credits [3]		37-40

1. Music students may take PSYC 151 Human Development (GT-SS3) (3 c.h.)or PSYC 251 Childhood and Adolescence (3 c.h.).
2. Music Education students may complete MUS 103 Music and Computer Technology I (1 c.h.) and MUS 306 Technology for Music Educators (2 c.h.) for ED 280 Educational Media and Technology (3 c.h.).
3. English/Language Arts student must also complete RDG 410 Teaching Reading (3 c.h.)
4. Physical Education students may complete EPER 465 Adapted Physical Education (3 c.h.) or ED 412 Teaching Diverse Learners (3 c.h.).
5. GPA of 2.6 required

Specific 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.

- 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.

English: Creative Writing Concentration, Bachelor of Arts

The BA in English with a Creative Writing Emphasis provides students with foundational knowledge in literature, writing and practice, critical thinking, literary theory, culture and diversity, literary citizenship, and the power of language that will empower them to innovate, communicate, and discover the necessary skills to thrive in their professional career paths and serve their community. The Creative Writing emphasis also prepares students for the professional opportunities in the creative writing world, MFA programs, and the rewarding and challenging world of publishing.

Student Learning Outcomes

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

1. Demonstrate fluency in literary history, cultural contexts, and current issues in English studies.
2. Conduct, analyze, evaluate, and integrate academic research and theory.
3. Employ critical and rhetorical theory to analyze and interpret texts.
4. Construct persuasive and reasonable arguments, using a range of rhetorical strategies.
5. Analyze literary and non-literary texts and synthesize ideas with clarity, accuracy, and coherence.

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.
- All English majors begin the program with ENG 114 Introduction to Creative Writing (GT-AH1) (3 c.h.) and ENG 201 Introduction to Literary Theory (3 c.h.) which establish the emphasized professional standards and the writing and analytical skills students will have

acquire in the program. All students in ENG 114 submit a final notebook and ENG 201 write a final paper, which are submitted to the department chairperson or committee for assessment.

- All English majors take ENG 493 Senior Seminar (3 c.h.) and ENG 414 Advanced Creative Writing Workshop (3 c.h.) emphasizing professional standards and synthesizing the writing and analytical skills students have acquired in other English classes. All students in ENG 493 write a senior research paper, one copy of which is submitted to the department chairperson for dissemination for review. In order to pass ENG 493, students must demonstrate satisfactory levels of achievement in meeting the program goals.
- English Program faculty review final materials from ENG 114, ENG 201, ENG 414, and ENG 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.

Specific Program Requirements

- Students should consult with an advisor in English prior to registration.
- All major courses must be completed with a C or better.
- Students must fulfill the University foreign language requirements for the BA degree: first year world language (6-8 credit hours), or ENG 106 & WL 100, or ASL 101 & ASL 102. International students are still required to complete the language requirements.
- For teaching endorsement requirements, see the Teacher Education Program section.

Specific Core Requirements

Course	Title	Credits
Required Courses	**Select two courses:**	**18**
ENG 114	Introduction to Creative Writing (GT-AH1)	3
ENG 201	Introduction to Literary Theory	3
ENG 204	Introduction to Rhetoric	3
ENG 414	Advanced Creative Writing Workshop	3
ENG 485	Literary Criticism and Theory	3
ENG 493	Senior Seminar	3
Culture & Diversity	**Select two courses:**	**6**
CID 335	Gender & Communication	3
ENG 106	Language, Thought and Culture	3
ENG 220	Survey of Chicano Literature (GT-AH2)	3
ENG 240	Multi-Ethnic American Literature (GT-AH2)	3
ENG 241	Women in Literature	3
Development & Impact	**Select two courses; one MUST be CID 350.**	**6**
CID 350	Communicating in Professions	3
ENG 115	Intro Tech Prof Writing GT-CO2	3
ENG 117	Intro. Scientific/Medical Writing (GT-CO2)	3
ENG 319	Professional Editing	3
ENG 445	Magazine Editing and Production	3
ENG 492	Research	3
Literature in Historical Perspective	**Select one set of courses and one 300-level course.**	**9**
ENG 210 & ENG 212	American Literature I and American Literature II	6
ENG 221 & ENG 222	Masterpieces of Literature I (GT-AH2) and Masterpieces of Literature II (GT-AH2)	6
ENG 231 & ENG 232	Literature of England I and Literature of England II	6
ENG 328	Contemporary Literature	3
ENG 360	Historical Perspectives in American Literature	3
ENG 361	Historical Perspectives in Western Literature	3
ENG 362	Historical Perspectives in Non-Western Literature	3
Major Writers	**Select two courses; one MUST be ENG 481.**	**6**
ENG 441	Chaucer and His Age	3
ENG 481	Shakespeare	3
ENG 484	Studies in Major Writers	3
Writing & Practice	**Select three courses:**	**9**
ENG 310	Literary Forms & Genres	3
ENG 315	Creative Writing: Poetry	3
ENG 316	Creative Writing: Fiction	3
ENG 317	Creative Nonfiction	3
ENG 318	Creative Writing: Drama	3
ENG 491	Special Topics	1-3
Total Credits		**54**

Specific 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.

- 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.

Spanish, Minor

The Spanish minor complements a wide variety of majors in other disciplines to enhance the students' ability to compete for jobs where knowledge of a world language is desirable. The minor helps students attain sufficient proficiency to converse comfortably on everyday topics, write and read at intermediate level or higher, and understand and appreciate Spanish-speaking cultures around the world and in the U.S.A.

Student Learning Outcomes for Minor in Spanish

Students minoring in 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.

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.

Outcomes Assessment Activities

The faculty of the Spanish program uses several methods for evaluating student learning outcomes for Spanish minors. These include an oral proficiency interview, a written proficiency test, and an exit survey.

Specific Program Requirements

Course	Title	Credits
SPN 101	Beginning Spanish I	3
SPN 102	Beginning Spanish II	3
SPN 201	Intermediate Spanish I (GT-AH4)	3
SPN 202	Intermediate Spanish II (GT-AH4)	3
SPN 203	Intermediate Proficiency Building	3
SPN 301	Spanish Grammar in Context	3
SPN 303	Spanish Phonetics & Phonology	3
or SPN 309	Intro to Hispanic Linguistics	
Select one other 300 or 400-level SPN course		3
Total Credits		**24**

World Languages-Spanish, Bachelor of Arts

The Bachelor of Arts in Spanish (BA) is intended to prepare students for the many careers where educated bilingual speakers are highly valued. Most of our students choose to double major or combine their Spanish BA with fields such as Social Work, Psychology, Sociology, English, Pre Nursing, Political Science, Media Communication, Business, Exercise Science, Public Health, etc. Other students complete their Spanish BA for teaching, translation certifications, or admission to graduate school.

Specific Admission Requirements

While there are no specific requirements for admission to the program, however, students who have prior exposure to Spanish through family interaction or previous studies need to be placed in the appropriate course for their level.

1. Students who have taken no Spanish in high school or at another institution of higher learning should begin with SPN 101 (https://catalog.csupueblo.edu/search/?P=SPN%20101) Beginning Spanish I.
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.

Student Learning Outcomes

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.

Outcomes Assessment Activities

The faculty of the Spanish program uses several methods for evaluating student learning outcomes for Spanish majors. These include an oral proficiency interview, a written proficiency test, a student portfolio, and an exit survey.

Specific Program Requirements

In addition to the courses listed below, Spanish majors must also meet the following requirements:

1. A senior assessment portfolio.
2. A minor or a second major.
3. Completion of the oral and written proficiency exams and of the graduating-senior survey.
4. At least one upper-division SPN course must emphasize Latin America, one Spain.

Study abroad is strongly encouraged, especially for students planning to teach.

Specific Core Requirements

Course	Title	Credits
SPN 101	Beginning Spanish I	3
SPN 102	Beginning Spanish II	3
SPN 201	Intermediate Spanish I (GT-AH4)	3
SPN 202	Intermediate Spanish II (GT-AH4)	3
SPN 203	Intermediate Proficiency Building	3
SPN 301	Spanish Grammar in Context	3
SPN 303	Spanish Phonetics & Phonology	3
or SPN 309	Intro to Hispanic Linguistics	
SPN 370	Intro to Literature & Culture	3
Select one of the following:		**3**
SPN 312	Conv & Comp: Mexico & Central Amer	3
SPN 313	Conv & Comp: South America	3
SPN 314	Conv & Comp: Caribbean	3
SPN 315	Conv & Comp: Spain	3
SPN 316	Conv & Comp: U.S. Latinx	3
Electives		**12**
Select four upper-division electives, of which at least two must be 400-level		
Total Credits		**39**

Course	Title	Credits
General Education		35
Spanish Major		39
Minor or Second Major		20-37
Electives		9-26
Total		**120**

Besides completing at least 120 credits including all coursework for the Spanish major, students need to:

- Attain a grade of C or better in all Spanish courses for the major
- Complete a minor, a second major, or 18 credits in another field of study.
- Complete an exit Oral Proficiency Interview (OPI)
- Complete an exit Written Proficiency Test (WPT)
- Complete a student portfolio
- Complete an exit survey

World Languages-Spanish: K-12 Teacher Preparation Concentration, Bachelor of Arts

The BA in Spanish with a Minor in Secondary Teaching Endorsement provides students with foundational knowledge in the Spanish language and Spanish speaking cultures around the world and in the United States. The skills and knowledge attained will empower students to teach and serve their community. Students work closely with the Teacher Education Program to gain the experience and necessary skills to thrive, lead, and innovate in the classroom.

Admission into the Education Minor:

The Education Minor is reserved for those undergraduate students pursuing a Colorado teaching license in conjunction with their major. It is a “protected” minor, which means students cannot just add it by themselves. When a student successfully completes our admission course (ED 301), the Education Minor is added to his/her program.

Admission into the Spanish Program:

There are no specific requirements for admission to the program, however, students who have prior exposure to Spanish through family interaction or previous studies need to be placed in the appropriate course for their level.

1. Students who have taken no Spanish in high school or at another institution of higher learning should begin with SPN 101 (https://catalog.csupueblo.edu/search/?P=SPN%20101) Beginning Spanish I.
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.

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.

Outcomes Assessment Activities

The faculty of the Spanish program uses several methods for evaluating student learning outcomes for Spanish majors. These include an oral proficiency interview, a written proficiency test, a student portfolio, and an exit survey.

Specific Program Requirements

In addition to the courses listed below, Spanish majors must also meet the following requirements:

1. A senior portfolio.
2. A minor in Education and completion of all requirements of the Teacher Education Program for K-12 Spanish licensure.
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.

Students completing a major in World Language-Spanish with an emphasis in K-12 are required to complete a minor in education and meet all other requirements outlined by the Teacher Education Program.

Study abroad is strongly encouraged.

Specific Core Requirements

Course	Title	Credits
SPN 101	Beginning Spanish I	3
SPN 102	Beginning Spanish II	3
SPN 201	Intermediate Spanish I (GT-AH4)	3
SPN 202	Intermediate Spanish II (GT-AH4)	3
SPN 203	Intermediate Proficiency Building	3
SPN 301	Spanish Grammar in Context	3
SPN 303	Spanish Phonetics & Phonology	3
or SPN 309	Intro to Hispanic Linguistics	
SPN 370	Intro to Literature & Culture	3
Select one of the following:		**3**
SPN 312	Conv & Comp: Mexico & Central Amer	3
SPN 313	Conv & Comp: South America	3
SPN 314	Conv & Comp: Caribbean	3
SPN 315	Conv & Comp: Spain	3
SPN 316	Conv & Comp: U.S. Latinx	3
Electives		**12**
Select four upper-division electives, of which at least two must be 400-level		
Total Credits		**39**

Course	Title	Credits
General Education		35
Spanish Major		39
Education Minor		37
Electives		9
Total		**120**

Specific Requirements for the Secondary and K-12 Teaching Endorsements/Minor

The student must complete an appropriate major and the following Education courses:

Course	Title	Credits
Select one of the following:		3
PSYC 151	Human Development (GT-SS3)	3
PSYC 251	Childhood and Adolescence	3
PSYC 342	Educational Psychology	3
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology [2]	3
ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
RDG 435	Disciplinary Literacy [3, 5]	4
Special Methods in Endorsement Areas (Prerequisites - Admission to Education) [5]		4
ED 412	Teaching Diverse Learners [4, 5]	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
or ED 489	Student Teaching K-12	
Total Credits [3]		37-40

[1] Music students may take PSYC 151 Human Development (GT-SS3) (3 c.h.)or PSYC 251 Childhood and Adolescence (3 c.h.).

[2] Music Education students may complete MUS 103 Music and Computer Technology I (1 c.h.) and MUS 306 Technology for Music Educators (2 c.h.) for ED 280 Educational Media and Technology (3 c.h.).

[3] English/Language Arts student must also complete RDG 410 Teaching Reading (3 c.h.)

[4] Physical Education students may complete EPER 465 Adapted Physical Education (3 c.h.) or ED 412 Teaching Diverse Learners (3 c.h.).
[5] GPA of 2.6 required

Besides completing at least 120 credits including all coursework for the Spanish major and education minor, students need to:

- Attain a grade of C or better in all Spanish courses for the major
- A total GPA of 2.6
- Complete an exit Spanish Oral Proficiency Interview (OPI)
- Complete an exit Spanish Written Proficiency Test (WPT)
- Complete a student Spanish Portfolio
- Complete an exit survey

World Languages-Spanish: Media & Entertainment Concentration, Bachelor of Arts

Specific Admission Requirements

Students must be receiving a BA in Spanish to complete the Media & Entertainment Concentration. Students must have intermediate Spanish proficiency to be admitted into the concentration. Students will have to complete a Modified Oral Proficiency Interview (MOPI) to determine their level.

Student Learning Outcomes

Spanish-Language Media 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 media and entertainment

These outcomes will be achieved by focusing on the 5 C's:

Communication: Students can communicate effectively in oral and written form, interpret messages, show cultural understanding when they communicate, and present oral and written information to various audiences for a variety of situations and purposes in Media.

Cultures: Students can interact with cultural competence and understanding by becoming attuned to Latinx cultures in the U.S. and beyond.They use the language to investigate, explain, and reflect on the practices, products and perspectives of Latinx cultures

Connections: Students are able to connect their knowledge and understanding of Spanish-language and Latinex cultures to the field of Media.

Comparisons: Students are able to compare and contrast Spanish language and cultures with other languages and cultures in the U.S in order to act with intercultural competence. They discover patterns, make predictions, and analyze similarities and differences.

Communities: Students form a community of practice around Spanish-language Media and participate directly in Latinex communities. They interact with linguistic and cultural competence.

Specific Program Requirements

Course	Title	Credits
General Education		35
Spanish Requirements		39
Media & Entertainment Requirements		46
Total Credits		**120**

In addition to the courses listed, students in this concentration must also meet the following requirements:

1. A Spanish Language senior project and portfolio completed through MAE 492 and MAE 499.
2. Completion of the oral and written proficiency exams and of the graduating-senior survey.

Specific General Education Requirements

Course	Title	Credits
CID 103	Speaking & Listening	3
MAE 101	Media & Society (GT-SS3)	3
CS 101	Introduction to Chicano Studies (GT-HI1)	3
Other General Education Courses		26
Total Credits		**35**

Specific Major Requirements

Course	Title	Credits
SPN 101	Beginning Spanish I	3
SPN 102	Beginning Spanish II	3
SPN 201	Intermediate Spanish I (GT-AH4)	3
SPN 202	Intermediate Spanish II (GT-AH4)	3
SPN 203	Intermediate Proficiency Building	3
SPN 301	Spanish Grammar in Context	3
SPN 303	Spanish Phonetics & Phonology	3
or SPN 309	Intro to Hispanic Linguistics	
SPN 370	Intro to Literature & Culture	3
Select one of the following		3
SPN 312	Conv & Comp: Mexico & Central Amer	3
SPN 313	Conv & Comp: South America	3
SPN 314	Conv & Comp: Caribbean	3
SPN 315	Conv & Comp: Spain	3
SPN 316	Conv & Comp: U.S. Latinx	3
SPN 317	Conversation & Composition: Topics	3
SPN 318	Conversation & Composition: Spanish Language Films	3
Select four upper-division electives, of which at least two must be 400-level		12
Total Credits		**39**

Specific Concentration Requirements

Course	Title	Credits
MAE 100	College & Career Success	1
MAE 220	Professional Media Writing	3
MAE 230	Sound, Radio, & Podcasting Essentials	3
MAE 240	Film & Video Essentials	3

MAE 250	Media Design Essentials	3
MAE 370	Social Media & Online Strategies	3
or MAE 351	Web Design & Development	
MAE 401	Law, Ethics, & Regulation of Media	3
or MAE 480	Copyright, Licensing, & Publishing	
MAE 492	Capstone: Research & Proposal	2
MAE 499	Capstone: Production & Delivery	2
Student Media Practicum		5
Directed Concentration	**Choose one MAE concentration from below.**	**18**
Multimedia Journalism & Storytelling		
Sports & eSports Media		
Strategic Communication		
Media & Entertainment Production - Film/Video or Sound/Radio/Podcasting		
Media, Entertainment, & Arts Management		
Total Credits		**46**

World Languages-Spanish: Translation Studies Concentration, Bachelor of Arts

Specific Admission Requirements

Students must be receiving a BA in Spanish to complete the Translation Studies Concentration. Students must have intermediate Spanish proficiency to be admitted into the concentration. Students will have to complete a Modified Oral Proficiency Interview (MOPI) to determine their level.

Student Learning Outcomes

Students who complete a concentration in Translation Studies will be able to:

- Apply basic concepts, theories and methods of translation;
- Understand the common problematic areas across all types of translation and how to resolve those issues;
- Navigate specific challenges pertaining to terminology, syntax, grammar, and cultural issues of various types of translation;
- Understand market rates and other entrepreneurial aspects of translation;
- Translate simple texts utilizing various registers (formal, informal) in the areas of marketing, business, law, media, social work, psychology, and/or other fields.

These outcomes will be achieved by focusing on the 5 C's:

Communication: Students can communicate effectively in Spanish in oral and written form, interpret messages, show cultural understanding when they communicate, and present oral and written information to various audiences for a variety of situations and purposes.

Cultures: Students can interact with cultural competence and understanding by becoming attuned to Latinx and Anglo cultures in the U.S. and beyond. They use the Spanish language to investigate, explain, and reflect on the practices, products and perspectives of Latinx and Anglo cultures through their translation work.

Connections: Students are able to connect their knowledge and their understanding of Spanish-language, English-language, and Latinx cultures with multiple other disciplines through translation work.

Comparisons: Students are able to compare and contrast Spanish-language and English-language cultures in order to act with intercultural competence. They discover patterns, make predictions, and analyze similarities and differences through their translation work.

Communities: Students form a community of practice around serving Spanish-speakers and English-speakers through translation work. They can participate directly in Latinx communities and interact with advanced linguistic and cultural competence. They form a network with other translators which can help advance their careers.

Specific Program Requirements

In addition to the courses listed below, Spanish majors with a Translation Studies Concentration must also meet the following requirements:

1. A senior assessment portfolio with a Translation Portfolio section.
2. A minor or a second major.
3. Completion of the oral and written proficiency exams and of the graduating-senior survey.
4. A grade of C or better in all Spanish courses for the major.

Course	Title	Credits
General Education		35
Spanish Major: Translation Studies Concentration		39
Minor or Second Major		20-37
Electives		9-26
Total		**120**

Course	Title	Credits
SPN 101	Beginning Spanish I	3
SPN 102	Beginning Spanish II	3
SPN 201	Intermediate Spanish I (GT-AH4)	3
SPN 202	Intermediate Spanish II (GT-AH4)	3
SPN 203	Intermediate Proficiency Building	3
SPN 301	Spanish Grammar in Context	3
SPN 303	Spanish Phonetics & Phonology	3
or SPN 309	Intro to Hispanic Linguistics	
Take one of the following:		3
SPN 312	Conv & Comp: Mexico & Central Amer	3
SPN 313	Conv & Comp: South America	3
SPN 314	Conv & Comp: Caribbean	3
SPN 315	Conv & Comp: Spain	3
SPN 316	Conv & Comp: U.S. Latinx	3
SPN 317	Conversation & Composition: Topics	3
SPN 318	Conversation & Composition: Spanish Language Films	3
SPN 370	Intro to Literature & Culture	3
SPN 341	Intro to Translation/Interpretation	3
SPN 441	Advanced Translation	3
Electives*		6

Take two upper-division electives, of which one must be at the 400-level.**	
Total Credits	**39**

*One of these can be 3 credits of SPN 342 or SPN 442 Translation Practicum. To be approved by the instructor and advisor.

**Students will have to complete a special translation project attached to each upper-division elective class. To be approved by the instructor and advisor.

Gaming & Immersive Media, Bachelor of Fine Arts

Bachelor of Fine Arts : Gaming & Immersive Media is an intensive professional degree pathway that exposes students to a breadth and depth of study in the areas of Game Development and Programing, Character Design, Animation, Sound for Games and UX research . Students complete a core foundation that includes integrated studies along with an exploration of Art, Design and Media Entertainment Essentials. Spring semester, sophomore students complete the Critical Fundamental Skills Review (ARC310) to move into Upper Division studies. Senior BFA candidates prepare and present a showcase portfolio and exhibition in their final Spring term that reflects upper division coursework as well as independent research. Successful student presentations demonstrate viability to function effectively within appropriate creative industries based on pathway emphasis.

Specific Admission Requirements

A passing ARC310 portfolio is required for entry to the Upper Division B.F.A. program of studies.

Transfer Students to BFA programs are evaluated for critical fundamental skills prior to their first term. ARC310 exemptions are issued for transfer students who demonstrate proficiency in the essentials necessary to successfully engage in upper-division (UD) pathway coursework.

Transfer students who are lacking in critical skill sets are advised into the appropriate essential workshops or courses prior to taking UD coursework in the areas identified as needing attention.

Program Goals

Practice Creative Persistence

- Work with autonomy to develop a capacity for making informed uncoerced decisions.
- Engage problem solving frameworks for exploring multiple strategies in the pursuit of effective creative and professional communication.

Manage Complexity

- Demonstrate organization skills and composure to maintain focus while navigating an increasingly enlarged space of contrasting performance requirements. I.E. innovation/efficiency, expression/communication, clarity/depth, and stability/change.

Engage Diversity

- Practice inclusion while recognizing the dynamics relative to intersecting approaches within a creative work environment.
- Appreciate, respect and value a range of social and creative perspectives.

Navigate Change

- Exercise thoughtful curiosity in the pursuit of creative and academic excellence.
- Explore opportunities afforded by the conditions of change.
- Think and create boldly in an environment of adversity and challenge.
- Be empowered by the notion 'I don't know.'

Student Learning Outcomes

Exploration of the Creative Process

- Experiment with and adopt a variety of processes, methods, and interpretations to explore innovative solutions to creative challenges.

Development of Skills & Techniques

- Exhibit sufficient fluency in one or more media to craft work that meets appropriate professional standards for the scale and scope of a project. Demonstrate an ability to adapt techniques and formal methods to serve the objectives of the work.

Communication of Ideas & Content

- Clearly articulate visually, orally, and in writing the content and context of art historical research and creative work.

Demonstrate Awareness & Intellectual Maturity

- Display a willingness to question one's own perspective. Approach a creative and scholarly process with curiosity and persistence. Take initiative, working independently or collaboratively, to achieve stated objectives.

Outcomes Assessment Activities

Student assessment will be performed each spring term. Those enrolled in ARC310 prepare and present a developmental portfolio of works that demonstrates proficiency at appropriate levels of the four Student Learning Outcomes.

The developmental portfolio reflects foundations coursework as well as independent research. Each presentation is assessed by at least three reviewers using the Department Rubric. Scores from reviewers are combined and averaged for each component. A score that averages at or below 1.5 on any one component requires automatic resubmission. The four averaged scores are added together for a final portfolio grade.

Portfolios presented for ARC310 must achieve a minimum score of 10 out of a possible 16 to be considered passing. Portfolios that earn below 10 may be reviewed for improvements and can be resubmitted in August of the following academic year. A passing ARC310 portfolio is required for entry to the Upper Division B.F.A. program of studies.

Senior students enrolled in ARC410 prepare and offer toward the end of the spring term, a showcase portfolio/research presentation that demonstrate proficiency at appropriate levels of the four Student Learning Outcomes.

BFA Portfolios/Presentations reflect upper division coursework as well as independent research. Each presentation is assessed by at least three reviewers using the Department Rubric. Scores from reviewers are combined and averaged for each component. A score that averages at or

below 1.5 on any one component requires automatic resubmission. The four averaged scores are added together for a final portfolio grade.

BFA Portfolios/Presentations offered for ARC410 must achieve a minimum score of 12 out of a possible 16 to be considered passing. Portfolios/Presentations that earn below 12 may be reviewed for improvements and can be resubmitted prior to graduation application deadlines. A passing ARC410 score is required for graduation.

Specific Program Requirements

Course	Title	Credits
FOUNDATIONS		**21**
ARC 110	Integrated Studies	3
ARC 174	Fundamentals of Digital Media	3
ARC 210	ARC: Design Frameworks	3
ART 141	Drawing I: Observational Drawing	3
ART 176	Photography: Expressive Composition	3
ARH 211	Global Art I (GT-AH1)	3
ARH 212	Global Art II (GT-AH1)	3
EXPLORATIONS	**Choose 4 of the following:**	**12**
ART 274	Art & Design Essentials	3
ART 276	Photography: Creative Lighting	3
MAE 230	Sound, Radio, & Podcasting Essentials	3
MAE 240	Film & Video Essentials	3
MAE 251	Gaming & Immersive Media Essentials	3
UPPER DIVISION PATHWAY CORE REQUIREMENTS	**Must be 300/400 ART and MAE subjects.**	**18**
UPPER DIVISION PATHWAY ELECTIVES	**Must be 300/400 ART and MAE subjects or other relevant departments**	**21**
UPPER DIVISION ART HISTORY		**6**
ARC PRACTICUM COURSEWORK	**Courses are repeatable.**	**5**
ARC 229	Practicum: Journalism & Print Publications	1
ARC 239	Practicum: Sound, Radio, & Podcasting	1
ARC 259	Practicum: Media Design & Advertising	1
ARC 249	Practicum: Film, Video, & Television	1
ARC 329	Advanced Practicum: Journalism & Print Publication	2
ARC 339	Advanced Practicum: Sound, Radio, & Podcasting	2
ARC 349	Advanced Practicum: Film, Video, & Television	2
ARC 359	Advanced Practicum: Media Design & Advertising	2
ARC PORTFOLIO WORKSHOPS		**2**
ARC 310	Critical Fundamental Skills Review	1
ARC 410	Senior Capstone Presentation	1
Total Credits		**85**

Additional Requirements

Course	Title	Credits
University General Education Requirements		35

Specific Graduation Requirements

BFA Portfolios/Presentations offered for ARC410 must achieve a minimum score of 12 out of a possible 16 to be considered passing. Portfolios/Presentations that earn below 12 may be reviewed for improvements and can be resubmitted prior to graduation application deadlines. A passing ARC410 score is required for graduation.

History, Political Science, Philosophy, & Geography Department

The Department of History, Political Science, Philosophy, and Geography offers a variety of majors and minors that prepare graduates for careers in fields such as government (federal, state, and local), education, law, non-profits, academia, non-governmental organizations, and the private sector, as well as preparing students for graduate or professional study. Across its programs the Department emphasizes critical thinking, research skills, and oral and written communications, along with a deeper understanding and ability to operate within and between different cultures. Our programs help students cultivate a life of the mind that will make them better citizens of their communities, countries, and world, able to effectively implement and manage rapid change.

The Department offers a BA and BS in History and a BA and BS in Political Science. Both majors offer a secondary education option that prepares graduates to teach at the middle and high school levels. The Department also offers minors in History and Political Science, alongside interdisciplinary minors in Homeland Security, Legal Studies, and Philosophy and Religious Studies.

Students wishing to connect their degree plans with specific career options should contact the Department.

Academic Programs

History

Undergraduate Programs

- History, Bachelor of Arts (p. 282)
- History, Bachelor of Science (p. 283)
- History: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 285)

Minors

- History, Minor (p. 284)

Political Science

Undergraduate Programs

- Political Science, Bachelor of Arts (p. 287)
- Political Science, Bachelor of Science (p. 288)
- Political Science: 7-12 Teacher Preparation Concentration, Bachelor of Arts (p. 290)
- Political Science: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 291)

Minors

- Legal Studies, Minor (p. 286)
- Political Science, Minor (p. 289)

Philosophy

Minors

- Philosophy & Religious Studies, Minor (p. 286)

Geography

Certificates

- Colorado Studies, Certificate (p. 282)
- Geography, Certificate (p. 282)

Geography (GEOG)

GEOG 101 Physical Geography 3(3-0)
Fall.
Three Earth spheres: the hydrosphere (oceanography, hydrologic cycle); the atmosphere (meteorology and climatology) and the lithosphere (geology, internal/external processes) are emphasized and examined.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

GEOG 102 Cultural Geography 3(3-0)
As Needed.
Emphasis on cultural regions, cultural diffusion, and cultural landscape. Major themes are culture, population, agriculture, language and religion, ethnicity, urbanization, industry, and political geography.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

GEOG 103 World Regional Geography (GT-SS2) 3(3-0)
Fall, Spring.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: SS, GT-SS2) (CC)

GEOG 291 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

GEOG 312 Colorado Geography 3(3-0)
As Needed.
CO geography including landforms, climate, biology, natural/water resources, settlement history, population growth/distribution, agriculture/ranching, power/transportation, manufacturing/service industries, urban landscape.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

GEOG 491 Special Topics 3(3-0)
Fall, Spring, Summer.
Devoted to special topics in Geography (human, physical, and regional).
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or Senior standing. Permission of instructor. Repeatable (99).

History (HIST)

HIST 110 World History to 1500 (GT-HI1) 3(3-0)
Fall, Spring.
Emergence of agricultural civilizations; political, economic, and social developments; growth of empires, trade, impact of geography, climate, disease; contact between Eurasia, Africa, Australasia, the Americas.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: HS, GT-HI1) (CC)

HIST 111 World History since 1500 (GT-HI1) 3(3-0)
Fall, Spring.
Columbian Exchange; growth of global empires, commerce, and international rivalries and cooperation; industrialization, spreading revolutions, the information age, and the emergence of the modern world.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: HS, GT-HI1) (CC)

HIST 136 (CS 136) The Southwest United States (GT-HI1) 3(3-0)
Fall, Spring.
This course traces the culture and historical development of the southwestern United States, including cultural contributions of the American Indian and Hispanic peoples.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: HS, GT-HI1) (CC)

HIST 201 U.S. History I (GT-HI1) 3(3-0)
Fall, Spring.
United States history from founding of North American colonies to 1877 Reconstruction era.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: HS, GT-HI1)

HIST 202 U.S. History II (GT-HI1) 3(3-0)
Fall, Spring.
United States from 1877 Reconstruction era to contemporary era.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: HS, GT-HI1)

HIST 250 Introduction to History for Majors 3(3-0)
Spring.
An introduction to the methods and concepts behind the study of history that history majors will use in their upper-level courses.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

HIST 291 Special Topics 1-3(1-3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (30).

HIST 295 Independent Study (1-3 V)
As Needed.
An individualized program of study designed by ranked, full-time History professor for a promising student.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

HIST 311 U.S. & Them: America in the World 3(3-0)
Spring, Odd.
From colonies to superpower, Americans' changing relationships with the world's other peoples, official and unofficial; war and peace, trade and embargo, policy and politics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 312 Colorado History 3(3-0)
Spring, Even.
History, government and economic factors important to the settlement and development of Colorado.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 330 Ancient Greece 3(3-0)
Spring, Even.
History of Greece from the Bronze Age to the Fourth Century B.C.E., emphasizing political, social, intellectual and cultural developments.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 333 Roman Republic 3(3-0)
Fall, Even.
History of the Roman Republic emphasizing the origin and expansion of Rome and its effect on political, social, intellectual and cultural developments.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 334 Roman Empire 3(3-0)
Spring, Odd.
History of the Roman Empire emphasizing political, social, economic and cultural developments.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 346 (CS 346) History of Mexico 3(3-0)
Spring, Even.
This course surveys the major political, economic, social and cultural developments of Mexico from pre-Columbian times to the present.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 352 Europe-Emergence, Empire, Evolution 3(3-0)
Spring, Even.
Survey of European history from late antiquity to the present; medieval period, Renaissance, Reformation, Enlightenment, Revolutions; modernity, extreme ideologies, World Wars, decolonization, steps to unification.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 362 History of Russia 3(3-0)
Fall, Odd.
Cultural and political development of Russian and Soviet history from 800 to the present; emphasis on impact of the Bolshevik Revolution on history.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 368 Blood, Tears & Glory: War & History 3(3-0)
Fall, Even.
How and why societies go to war, fight wars, and deal with the consequences. Provides a global view of military history emphasizing culture and combat.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 372 History Of Modern China 3(3-0)
Fall, Even.
Cultural and political developments in modern China; emphasis on the interplay between Chinese tradition and western challenges.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 395 Independent Study (1-3 V)
Fall, Spring, Summer.
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: None.
Corequisite: None.
Registration Information: Previous work in History. Permission of Instructor.

HIST 410 (LEGL 410) Creation of the US Constitution 3(3-0)
Spring, Odd.
Explores writing and ratification of U.S. Constitution.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 413 American West 3(3-0)
Fall, Odd.
Role of the individual and the group in the development of the frontier into the 20th century.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 414 The American Civil War 3(3-0)
Spring, Even.
Social, cultural, and political developments that caused the sectional crisis, secession, and war. War coverage includes military strategy, politics, diplomacy, and emancipation.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 415 (LEGL 415) Civil Rights 3(3-0)
Fall, Odd.
Survey from Reconstruction to Black Lives Matter; particular focus on judicial, presidential, legislative, and grassroots efforts to promote change.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 428 (SOC 428, WS 428) Women & Work 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Junior or senior standing. Permission of instructor.

HIST 432 (LEGL 432) Religion & Politics in US History 3(3-0)
Fall, Even.
Explores intersection of religion & politics in US history. Emphasis on 1st Amendment, particularly church and state. Will discuss meaning of the 1st Amendment, evolution, school prayer, rise of the religious right, KKK.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 445 Topics in the History of Empires 3(3-0)
Fall, Odd.
Comparative study of empires with in-depth analysis of specific topics and themes. Variable Content.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (9).

HIST 448 (LEGL 448) Roman Law 3(3-0)
Fall, Odd.
Uses case studies to explore developments in Roman legal procedure and consider both why these developments took place and how they helped to create a system of law that could be adapted in successive centuries.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 489 (CS 489) Borderlands 3(3-0)
Spring, Odd.
History of the Mexican cession to the U.S. from its Indian and Hispanic origins to the present.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 491 Special Topics 1-3(1-3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

HIST 493 Seminar 3(3-0)
Fall, Spring.
Seminar devoted to special topics and issues in history; emphasis on research paper.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 495 Independent Study (1-3 V)
Fall, Spring, Summer.
An individualized program of study designed by a ranked full-time Historian for a History major or minor.
Prerequisite: None.
Corequisite: None.
Registration Information: History major or minor. Permission of instructor.

HIST 498 Internship (3-6 V)
Fall, Spring, Summer.
For advanced students. Practical experience through internship with museums, libraries with historical collections, and other community organizations.
Prerequisite: None.
Corequisite: None.
Registration Information: History major or minor. Junior or senior standing. Permission of Department. Repeatable (6).

HIST 591 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 595 Independent Study (1-3 V)
Fall, Spring, Summer.
An individualized program of study designed by a ranked Historian.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of Graduate Director. Repeatable (6).

Philosophy (PHIL)

PHIL 102 Philosophical Literature (GT-AH3) 3(3-0)
Fall, Spring.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H, GT-AH3)

PHIL 107 Intro to Religious Studies (GT-AH3) 3(3-0)
Fall, Spring.
An introduction to the study of religion, including theories, methods, and practices that scholars employ as they investigate religion.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H, GT-AH3) (CC)

PHIL 120 Islam and Non-Western Religions (GT-AH3) 3(3-0)
Fall, Spring.
A study of major world religions including Buddhism, Confucianism, Hinduism, Islam, Jainism, Sikhism, Shinto, Taoism, Zoroastrianism.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H, GT-AH3) (CC)

PHIL 201 Classics in Ethics (GT-AH3) 3(3-0)
Fall, Spring.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H, GT-AH3)

PHIL 204 Critical Reasoning (GT-AH3) 3(3-0)
Fall, Spring.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H, GT-AH3)

PHIL 205 Deductive Logic (GT-AH3) 3(3-0)
Fall, Spring.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H, GT-AH3)

PHIL 280 The Ancients: Person, Polis, Cosmos 3(3-0)
As Needed.
Exploration of the ancient origins of Western philosophy with an emphasis on the Presocratics, the Sophists, Socrates, Plato and Aristotle.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

PHIL 291 Special Topics (1-3 V)
As Needed.
Students who have an area of special interest are encouraged to contact the department. Special topics and authors of philosophical interest.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (12).

PHIL 295 Independent Study (1-3 V)
As Needed.
Specialized study of select persons, ideas, schools, historical trends or problems in philosophy.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (9).

PHIL 491 Special Topics (1-3 V)
As Needed.
Special topics and authors of philosophical interest. Students who have an area of special interest are encouraged to contact the department.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (12).

PHIL 495 Independent Study (1-3 V)
As Needed.
Specialized study of select persons, ideas, schools, historical trends or problems in philosophy.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (9).

PHIL 498 Internship (3-6 V)
As Needed.
Practical experience through internship with libraries, charitable groups, and other community organizations.
Prerequisite: None.
Corequisites: None.
Registration Information: For advanced students. Junior or senior status recommended. Departmental permission required.

Political Science (POLS)

POLS 101 American Government (GT-SS1) 3(3-0)
Fall, Spring.
An introduction to American government and politics, with attention to party politics, congressional behavior, the Constitution, the Supreme Court, civil liberties, civil rights, political economy, public policy, and more.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS1)

POLS 102 State & Local Government 3(3-0)
Spring.
State and local governments profoundly shape our communities, economies, schools, environments, and more. This course studies state and local politics and policy in the U.S., with special attention to Colorado governments.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS)

POLS 106 Race & Ethnicity in American Democracy (GT-SS1) 3(3-0)
Fall.
Understanding the theoretical conceptions of race and ethnicity in the United States and how these concepts inform notions of citizenship, group membership, political behavior, and policy outcomes across racial/ethnic groups.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS1)

POLS 201 International Relations (GT-SS1) 3(3-0)
Fall, Spring.
Introductory study of world affairs. Topics include: international economics, institutions, war, human rights, and the environment. Designed for students with no background in international relations.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS1) (CC)

POLS 202 Comparative Politics 3(3-0)
Fall.
Studies politics, political systems, and governance in various countries, from the UK and France to Mexico and China. The course emphasizes comparative analysis and understanding.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS) (CC)

POLS 230 War & Film 3(3-0)
Spring, Odd.
Exploration of the relationship between war, film, and political culture. Emphasizes portrayal of war through film and popular interpretation of historical events given this medium.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 231 Politics & Film 3(3-0)
Spring, Even.
Exploration of the relationship between politics, film, and political culture. Emphasizes portrayal of politics through film and popular interpretation of historical events given this medium.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 250 Political Analysis & Methods I 3(3-0)
Fall.
Introduction to methods and tools of research in political science, with a focus on causal inference, statistical inference, and the analysis of quantitative data.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 251 Political Analysis & Methods II 3(3-0)
Spring.
Workshop in political and policy analysis, with a focus on writing skills, critical data analysis, and independent research.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 270 Introduction to Homeland Security 3(3-0)
As Needed.
An overview of homeland security, key threats, challenges and potential responses.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 271 Terrorism 3(3-0)
Fall.
An examination of extremist groups and private violence in the context of monitoring, prevention, and responses.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 272 Critical Incident Management 3(3-0)
As Needed.
The policies and practices of local first responders, inter-agency relationships, political violence and unconventional weapons.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 275 Public Policy for Peace Officers 3(3-0)
As Needed.
Content on diversity, law, policy, communication, and police procedures.
Prerequisite: None.
Corequisites: None.
Registration Information: Course is reserved for Peace Officers completing the Police Academy. Credit is awarded concurrently in Criminology, Political Science, & Social Work.

POLS 291 Special Topics (1-3 V)
As Needed.
Study of Political Events.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

POLS 300 Political Parties and Elections 3(3-0)
As Needed.
Examines the organization and function of political parties and the roles of political parties, pressure groups, and public opinion in American elections.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 302 Latinos in American Democracy 3(3-0)
Spring, Even.
Understanding the formation of Latinos/Hispanics as a distinct ethnic-political group in American politics and how the political behavior of Latinos/Hispanics differs from other racial-ethnic groups.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

POLS 305 International Conflict 3(3-0)
Fall, Odd.
Introductory study of arguments related to the outbreak of violent international warfare. Emphasis on coercive bargaining, diplomacy, arms races, and contentious issues.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 306 Peace Studies 3(3-0)
Fall, Even.
Introductory study of arguments related to violent conflict prevention, mitigation, and resolution. Emphasis on international law, peacekeeping, peace building, ethics, and non-violent organization.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor.

POLS 312 Colorado Government & Politics 3(3-0)
As Needed.
Covers multidimensional features of CO state government - organization; constitutional foundations; change over time; direct and indirect impacts on daily life - and how structures shape state politics.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

POLS 322 (LEGL 322) American Constitutional Law 3(3-0)
Fall.
Survey of American constitutional law; emphasis on Supreme Court decisions defining the extent and limits and of governmental authority and the rights and liberties of individual citizens.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 323 (LEGL 323) Criminal Law & Procedure 3(3-0)
Spring.
Content and characteristics of criminal law and procedures. Roles and functions of persons and agencies involved in judicial administration.
Prerequisite: POLS 101.
Corequisites: None.
Registration Information: Permission of instructor.

POLS 324 (LEGL 324) Family Law 3(3-0)
Spring.
Survey of legal issues concerning domestic relations; Supreme Court decisions and legislative enactments.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 330 Introduction to Public Administration 3(3-0)
As Needed.
Role of public bureaucracy in modern society. Principles and processes of public administration, personnel management and administrative responsibility.
Prerequisite: POLS 101.
Corequisites: None.
Registration Information: Permission of instructor.

POLS 340 Public Policy 3(3-0)
Fall.
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: POLS 101.
Corequisites: None.
Registration Information: Permission of instructor.

POLS 350 Political Attitudes & Behavior 3(3-0)
Spring.
This course studies mass political attitudes, behavior, and psychology, including party identification and opinion formation. It also studies the effects of public opinion on democracy and methods of survey research.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 360 Media, Politics, & Power 3(3-0)
Fall, Odd.
Assesses the role U.S. media plays in holding power accountable in the digital age. Topics include agenda setting and issue framing, the impact of media on public opinion, and how political actors shape media narratives.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 370 Western Political Thought 3(3-0)
Spring.
Systematic survey of political thought from beginnings in Ancient Near East to present. Emphasis on contributions relevant to contemporary political theory.
Prerequisite: POLS 101.
Corequisites: None.
Registration Information: Permission of instructor.

POLS 373 Intelligence & National Security 3(3-0)
As Needed.
Examines inter-agency relations as well as practical and political elements of domestic intelligence gathering.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 374 Homeland Security & the Law 3(3-0)
As Needed.
Explores the legal and constitutional aspects of homeland security and homeland defense.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 375 Threat & Strategic Planning 3(3-0)
As Needed.
Topics include the development of threat assessment and planning, public-private sector resource partnering and crisis communication.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 376 (LEGL 376) Cyber Law 3(3-0)
Spring.
Explore domestic and international law and policy governing cyber-related issues such as cybercrime, cyberwar, and the balance between civil liberties and national security in an electronic age.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 377 Political Leadership Analysis 3(3-0)
As Needed.
This course studies psychological theories of political leadership and decision making. It also considers a variety of methodological approaches to assessing political leaders at a distance.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

POLS 395 Independent Study (1-3 V)
As Needed.
Independent study involving specialized reading and research.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (6).

POLS 411 (LEGL 411) Congress & the Presidency 3(3-0)
Fall, Even.
Study of the powers, politics, and structure of the U.S. congress and presidency.
Prerequisite: POLS 101.
Corequisites: None.
Registration Information: Permission of instructor.

POLS 430 War & Film 3(3-0)
Spring, Odd.
Exploration of the relationship between war, film, and political culture. Emphasizes portrayal of war through film and popular interpretation of historical events given this medium.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 431 Politics & Film 3(3-0)
Spring, Even.
Exploration of the relationship between politics, film, and political culture. Emphasizes portrayal of politics through film and popular interpretation of historical events given this medium.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 440 Nationalism & Ethnic Conflict 3(3-0)
Spring.
Ethno-nationalist conflict characterizes many of the world's most intractable and violent conflicts. This course studies ethno-nationalist conflict and identity formation in countries around the world.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 445 Economic Development 3(3-0)
Spring.
What explains economic development and inequality? How does political economics vary between rich and poor countries? The course studies the political economy of development in both developed and developing nations.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 450 Democracy & Dictatorship 3(3-0)
Spring.
How do dictators and one-party regimes stay in power? Why do some democracies fail? This course studies comparative dictatorship, comparative democracy, and regime change.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 460 U.S. Foreign & Security Policy 3(3-0)
Fall, Odd.
Investigate ongoing contemporary issues, and explore arguments related to strategic policy, political leadership, military development and application, and policy evolution.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor.

POLS 473 American Political Thought 3(3-0)
As Needed.
Development of American segment of modern political thought from colonial times to present. Interrelationship of individuals, ideas and institutions shaping modern American political responses.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 480 Practicum in Politics and Public Service (1-6 V)
As Needed.
Practical experience as interns in governmental agencies, political parties, or legal offices.
Prerequisite: None.
Corequisites: None.
Registration Information: For advanced students. Departmental permission required.

POLS 491 Special Topics (1-3 V)
As Needed.
Special topics in political science.
Prerequisite: None.
Corequisites: None.
Registration Information: Lower division courses in Political Science are recommended. Repeatable (99).

POLS 492 Research (1-3 V)
As Needed.
Individual research project under the supervision and direction of a faculty member resulting in a thesis, or research with a faculty member resulting in a similar work product.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (6).

POLS 493 Seminar (1-3 V)
Spring.
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: POLS 250 and POLS 370.
Corequisites: None.
Registration Information: Permission of instructor.

POLS 495 Independent Study (1-3 V)
As Needed.
An individualized program of study designed by a ranked faculty member in the political science program and approved by the program coordinator.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

POLS 498 Internship (3-6 V)
As Needed.
Practical experience as interns in governmental agencies, political parties, or legal offices.
Prerequisites: None.
Corequisites: None.
Registration Information: For advanced students. Departmental permission required. Repeatable (12).

POLS 510 Public and Nonprofit Leadership (3 V)
Spring.
Theories of leadership and management how they apply to the public and nonprofit sectors. Covers topics such as motivation, fostering teamwork, conflict management, communication, volunteer management, and others.
Prerequisite: None.
Corequisites: None.
Registration Information: Admittance into CSU Pueblo's Online MBA program. Permission of instructor.

POLS 520 Public Budgeting & Financial Management 3(3-0)
As Needed.
Overview of public organization budgeting processes and issues such as accounting, procurement, cash flow management, and revenue projection. Nonprofit fundraising, as well as grant writing/grants management, also covered.
Prerequisite: None.
Corequisites: None.
Registration Information: Admittance into CSU-Pueblo's Online MBA program, or permission of the instructor required.

POLS 530 Essentials of Public and Nonprofit Management 3(3-0)
As Needed.
Historical and political overview of the scope of public and nonprofit sectors, as well as theories of public and nonprofit management/leadership, public organizational behavior, and accountability/ethics.
Prerequisite: None.
Corequisites: None.
Registration Information: Admittance into CSU-Pueblo's Online MBA program, or permission of the instructor required.

POLS 540 The Public Policy Process 3(3-0)
As Needed.
Overview of policymaking processes, including agenda setting, policy formation, and implementation, and evaluation. Special attention will be paid to how these process work in specific policy domains that impact business.
Prerequisite: None.
Corequisites: None.
Registration Information: Admittance into CSU-Pueblo's Online MBA program, or permission of the instructor required.

POLS 591 Special Topics (1-3 V)
As Needed.
Special topics in political science.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of program coordinator. Repeatable (99).

POLS 595 Independent Study (1-3 V)
As Needed.
An individualized program of study designed by a ranked faculty member in the political science program and approved by the program coordinator.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of program coordinator. Repeatable (99).

Colorado Studies, Certificate

Student Learning Outcomes

- Students will demonstrate an understanding of the history, geography, and government and politics of Colorado
- Students will define their roles as citizens or temporary residents of Colorado

Specific Program Requirements

Course	Title	Credits
HIST 312	Colorado History	3
GEOG 312	Colorado Geography	3
POLS 312	Colorado Government & Politics	3
Total Credits		**9**

Geography, Certificate

Student Learning Outcomes

- Students will demonstrate an understanding of the basic principles and theories of the study of Geography
- Students will apply geographical thinking to issues of current relevance

Specific Program Requirements

Course	Title	Credits
Select 9 credits from the following:		**9**
GEOG 101	Physical Geography	3
GEOG 102	Cultural Geography	3
GEOG 103	World Regional Geography (GT-SS2)	3
GEOG 312	Colorado Geography	3
BIOL 461	Applied Geospatial Technology (GIS/GPS)	3
Total Credits		**9**

History, Bachelor of Arts

Why study history? The answer is because we virtually must, to gain access to the laboratory of human experience. When we study it reasonably well, and so acquire some usable habits of mind, as well as some basic data about the forces that affect our own lives, we emerge

with relevant skills and an enhanced capacity for informed citizenship, critical thinking, and simple awareness. The uses of history are varied. Studying history can help us develop some literally “salable” skills, but its study must not be pinned down to the narrowest utilitarianism. Some history—that confined to personal recollections about changes and continuities in the immediate environment—is essential to function beyond childhood. Some history depends on personal taste, where one finds beauty, the joy of discovery, or intellectual challenge. Between the inescapable minimum and the pleasure of deep commitment comes the history that, through cumulative skill in interpreting the unfolding human record, provides a real grasp of how the world works.—Peter Stearns

The BA program offers students the opportunity to integrate world language study into their curriculum. Knowledge of languages beyond English opens many educational and career doors to graduates that will otherwise remain closed.

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.

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 HIST 493 Seminar (3 c.h.). Portfolio papers are reviewed on the basis of the student learning outcomes.

Specific Program Requirements

Course	Title	Credits
General Education [1]		36
History Core		18
History Electives [2,3]		18
Total Credits		**72**

1. Must include at least 2 world language courses.
2. At least 6 hours must be from non-US history courses (as determined by the student’s advisor).
3. At least 15 hours must be upper division.

Specific Core Requirements

Course	Title	Credits
HIST 110	World History to 1500 (GT-HI1)	3
HIST 111	World History since 1500 (GT-HI1)	3
HIST 201	U.S. History I (GT-HI1)	3
HIST 202	U.S. History II (GT-HI1)	3
HIST 250	Introduction to History for Majors	3
HIST 493	Seminar	3
Total Credits		**18**

Specific Graduation Requirements

- No grade below C is acceptable in the major or minor.
- Students are expected to complete HIST 493 Seminar (3 c.h.) in their final year. Class size in HIST 493 Seminar (3 c.h.) is limited. A grade of D+ or lower in HIST 493 Seminar (3 c.h.) will, after the third attempt in either course, result in the student 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 493 Seminar (3 c.h.) in residence. No courses will be accepted in transfer to substitute for this course.

History, Bachelor of Science

"Why study history? The answer is because we virtually must, to gain access to the laboratory of human experience. When we study it reasonably well, and so acquire some usable habits of mind, as well as some basic data about the forces that affect our own lives, we emerge with relevant skills and an enhanced capacity for informed citizenship, critical thinking, and simple awareness. The uses of history are varied. Studying history can help us develop some literally 'salable' skills, but its study must not be pinned down to the narrowest utilitarianism. Some history—that confined to personal recollections about changes and continuities in the immediate environment—is essential to function beyond childhood. Some history depends on personal taste, where one finds beauty, the joy of discovery, or intellectual challenge. Between the inescapable minimum and the pleasure of deep commitment comes the history that, through cumulative skill in interpreting the unfolding human record, provides a real grasp of how the world works."—Peter Stearns

The BS in History allows students to maximize their focus on courses in the discipline.

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.

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 HIST 493 Seminar (3 c.h.). Portfolio papers are reviewed on the basis of the student learning outcomes.

Specific Program Requirements

Course	Title	Credits
General Education		36
History Core		18
History Elective [1,2]		24
Minor or Second Major		42
Total Credits		**120**

[1] At least 6 hours must be from non-US history courses (as determined by the student's advisor).

[2] At least 21 hours must be upper division.

Specific Core Requirements

Course	Title	Credits
HIST 110	World History to 1500 (GT-HI1)	3
HIST 111	World History since 1500 (GT-HI1)	3
HIST 201	U.S. History I (GT-HI1)	3
HIST 202	U.S. History II (GT-HI1)	3
HIST 250	Introduction to History for Majors	3
HIST 493	Seminar	3
Total Credits		**18**

Specific Graduation Requirements

- No grade below C is acceptable in the major or minor.
- Students are expected to complete HIST 493 SEMINAR (3.00 c.h.) in their final year. Class size in HIST 493 SEMINAR (3.00 c.h.) is limited. A grade of D+ or lower in HIST 493 SEMINAR (3.00 c.h.) will, after the third attempt in either course, result in the student 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 493 SEMINAR (3.00 c.h.) in residence. No courses will be accepted in transfer to substitute for this course.

History, Minor

"Why study history? The answer is because we virtually must to gain access to the laboratory of human experience. When we study it reasonably well, and so acquire some usable habits of mind as well as some basic data about the forces that affect our own lives, we emerge with relevant skills and an enhanced capacity for informed citizenship, critical thinking, and simple awareness. The uses of history are varied. Studying history can help us develop some literally 'salable' skills, but its study must not be pinned down to the narrowest utilitarianism. Some history—that confined to personal recollections about changes and continuities in the immediate environment—is essential to function beyond childhood. Some history depends on personal taste, where one finds beauty, the joy of discovery, or intellectual challenge. Between the inescapable minimum and the pleasure of deep commitment comes the history that, through cumulative skill in interpreting the unfolding human record, provides a real grasp of how the world works."—Peter Stearns

The History Minor is compatible with any campus major, and adds breadth and depth to any course of study. The minor has specific relevance to such diverse fields as wildlife management, business, political science, psychology, and sociology.

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.

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 HIST 493 Seminar (3 c.h.). Portfolio papers are reviewed on the basis of the student learning outcomes.

Specific Program Requirements

Course	Title	Credits
HIST 110	World History to 1500 (GT-HI1)	3
HIST 111	World History since 1500 (GT-HI1)	3
HIST 201	U.S. History I (GT-HI1)	3
HIST 202	U.S. History II (GT-HI1)	3
Select 9 credits in History Electives approved by the minor advisor		9
Total Credits		**21**

History: 7-12 Teacher Preparation Concentration, Bachelor of Science

"Why study history? The answer is because we virtually must, to gain access to the laboratory of human experience. When we study it reasonably well, and so acquire some usable habits of mind, as well as some basic data about the forces that affect our own lives, we emerge with relevant skills and an enhanced capacity for informed citizenship, critical thinking, and simple awareness. The uses of history are varied. Studying history can help us develop some literally 'salable' skills, but its study must not be pinned down to the narrowest utilitarianism. Some history—that confined to personal recollections about changes and continuities in the immediate environment—is essential to function beyond childhood. Some history depends on personal taste, where one finds beauty, the joy of discovery, or intellectual challenge. Between the inescapable minimum and the pleasure of deep commitment comes the history that, through cumulative skill in interpreting the unfolding human record, provides a real grasp of how the world works."—Peter Stearns

The secondary education concentration prepares graduates for licensure as social studies teachers, and includes courses in economics, education, geography, and political science.

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.

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 HIST 493 Seminar (3 c.h.). Portfolio papers are reviewed on the basis of the student learning outcomes.

Specific Program Requirements

Students completing a major in history with a concentration in secondary education are required to complete a minor in education and meet all other requirements outlined by the Teacher Education Program

Course	Title	Credits
General Education		36
History Core		18
History Electives [1,2]		18
Required Social Science Courses		15
ECON 201	Principles of Macroeconomics (GT-SS1)	3
GEOG 101	Physical Geography	3
GEOG 103	World Regional Geography (GT-SS2)	3
POLS 101	American Government (GT-SS1)	3
POLS 102	State & Local Government	3
Secondary & K-12 Education Minor		37-40
Total Credits		**124-127**

[1] At least 6 hours must be from non US history courses (as determined by the student's advisor), and at least 15 hours must be upper level.

[2] At least 15 credits must be upper division.

Specific Core Requirements

Course	Title	Credits
HIST 110	World History to 1500 (GT-HI1)	3
HIST 111	World History since 1500 (GT-HI1)	3
HIST 201	U.S. History I (GT-HI1)	3

HIST 202	U.S. History II (GT-HI1)	3
HIST 250	Introduction to History for Majors	3
HIST 493	Seminar	3
Total Credits		**18**

Specific Requirements for the Secondary and K-12 Teaching Endorsements/Minor

The student must complete an appropriate major and the following Education courses:

Course	Title	Credits
Select one of the following:		3
PSYC 151	Human Development (GT-SS3)	3
PSYC 251	Childhood and Adolescence	3
PSYC 342	Educational Psychology	3
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology [2]	3
ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
RDG 435	Disciplinary Literacy [3, 5]	4
Special Methods in Endorsement Areas (Prerequisites - Admission to Education) [5]		4
ED 412	Teaching Diverse Learners [4, 5]	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
or ED 489	Student Teaching K-12	
Total Credits [3]		37-40

1. Music students may take PSYC 151 Human Development (GT-SS3) (3 c.h.)or PSYC 251 Childhood and Adolescence (3 c.h.).
2. Music Education students may complete MUS 103 Music and Computer Technology I (1 c.h.) and MUS 306 Technology for Music Educators (2 c.h.) for ED 280 Educational Media and Technology (3 c.h.).
3. English/Language Arts student must also complete RDG 410 Teaching Reading (3 c.h.)
4. Physical Education students may complete EPER 465 Adapted Physical Education (3 c.h.) or ED 412 Teaching Diverse Learners (3 c.h.).
5. GPA of 2.6 required

Legal Studies, Minor

CSU Pueblo students who achieve a Legal Studies minor have 100 percent acceptance rate into law school. The CSU Pueblo Legal Studies Minor had a proven track record of preparing student for the LSAT exam. The program provides student with an introduction to the student of the law. It allows students to take courses across several disciplines. The curriculum offers students knowledge of the history of the American legal system, the development and controversies of Constitutional law, and legal ethics. The Legal Studies minor consists of three (3) required courses (with options) and three (3) electives.

Our interdisciplinary approach to the study of law allows for alumni distinguished and diverse career paths. In addition to enter the law profession as an attorney the Legal Studies minor might prompt entry into careers in immigration, law enforcement, corrections, criminal investigation, court administration, corporate legal affairs, or positions as diverse as a game warden, customs agent, U.S. Marshall, or agent with the Federal Bureau of Investigation, Homeland Security, or Central Intelligence Agency.

Program Highlights

1. 100% of Legal Studies Minors have been accepted into law school.
2. 10 credit hours including nine courses and 9 electives.
3. Internship opportunities in law offices, government agencies, and non-profit organizations.

Specific Program Requirements

Course	Title	Credits
Core Courses		**12**
LEGL 415	Civil Rights	3
LEGL 322	American Constitutional Law	3
LEGL 323	Criminal Law & Procedure	3
Choose one of the following:		
PHIL 204	Critical Reasoning (GT-AH3)	3
PHIL 205	Deductive Logic (GT-AH3)	3
Elective Courses	**Choose 2 of the following:**	**6**
LEGL 410	Creation of the US Constitution	3
LEGL 411	Congress & the Presidency	3
LEGL 324	Family Law	3
LEGL 376	Cyber Law	3
LEGL 432	Religion & Politics in US History	3
LEGL 448	Roman Law	3
PHIL 204	Critical Reasoning (GT-AH3)	3
PHIL 205	Deductive Logic (GT-AH3)	3
Total Credits		**18**

Note: Only one class taken for the Legal Studies minor can also be counted toward one of the following: the History major or minor, the Political Science major or minor, or Philosophy minor.

Philosophy & Religious Studies, Minor

Through the minor in philosophy and religious studies, students explore questions of life, creation, knowledge, society, and culture through an array of philosophical and historical perspectives and traditions. Students also apply philosophical ideas and methods to their professional interests and personal passions.

Students can take one of two tracks. In the philosophy track, students study the great thinkers, from Plato to the present, across Western and non-Western intellectual traditions. The religion track has students understanding the tenets, history, and impact of Christianity, Islam, Judaism, Hinduism, Buddhism, Sikhism, and other religions across cultures.

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 and religious ideas in the historical interplay of philosophy, religion, and culture.
- Students will be able to apply philosophical methods to conduct ethical, metaphysical, and epistemological analyses.

Outcomes Assessment Activities

The coordinator of the Philosophy Program maintains a portfolio for each student with a declared minor in philosophy and religious studies. Portfolios include a student's major papers written for the courses, transcripts, and other pertinent information. Student portfolios, in conjunction with other direct and indirect measures, form the basis for evaluating expected outcomes.

Specific Program Requirements

Students who wish to minor in philosophy and religious studies must complete a minimum of 18 credit hours of approved philosophy and religious studies courses with grades of C or better.

Note: Courses used to fulfill requirements for one track cannot also be used to fulfill requirements (including elective requirements) for the second track.

Philosophy Track

Course	Title	Credits
Required Courses for Philosophy Track		
PHIL 102	Philosophical Literature (GT-AH3)	3
PHIL 201	Classics in Ethics (GT-AH3)	3
POLS 370	Western Political Thought	3
Elective Courses for Philosophy Track		**9**
HIST 432	Religion & Politics in US History	3
PHIL 107	Intro to Religious Studies (GT-AH3)	3
PHIL 120	Islam and Non-Western Religions (GT-AH3)	3
PHIL 204	Critical Reasoning (GT-AH3)	3
PHIL 205	Deductive Logic (GT-AH3)	3
PHIL 280	The Ancients: Person, Polis, Cosmos	3
PHIL 291	Special Topics	1
PHIL 295	Independent Study	1
PHIL 491	Special Topics	1
PHIL 495	Independent Study	1
PHIL 498	Internship	3-6
Total Credits		**18**

Religious Studies Track

Course	Title	Credits
Required Courses for the Religious Track		
PHIL 107	Intro to Religious Studies (GT-AH3)	3
PHIL 120	Islam and Non-Western Religions (GT-AH3)	3
HIST 432	Religion & Politics in US History	3
Elective Courses for the Religious Studies Track		**9**
PHIL 102	Philosophical Literature (GT-AH3)	3
PHIL 201	Classics in Ethics (GT-AH3)	3
PHIL 204	Critical Reasoning (GT-AH3)	3
PHIL 205	Deductive Logic (GT-AH3)	3
PHIL 280	The Ancients: Person, Polis, Cosmos	3
PHIL 291	Special Topics	1
PHIL 295	Independent Study	1
PHIL 491	Special Topics	1
PHIL 495	Independent Study	1
PHIL 498	Internship	3-6
Total Credits		**18**

Political Science, Bachelor of Arts

The major in political science leads to the degrees of Bachelor of Arts (BA) and Bachelor of Science (BS). The political science curriculum focuses heavily on the development of analytical and communication skills – along with comprehensive knowledge of public policy, politics, current events, and history – and as such prepares undergraduates for a wide range of in the private, public, and non-profit sectors. 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 degree Programs.

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

(KO1) Students should have factual knowledge of many aspects of politics and government that are central objects of study in each of the subfields in political science (American politics, comparative politics, international relations, and political theory).

(KO2) Students should be able to explain core debates (or scholarly theories and perspectives) in the subfields of political science.

Writing Outcome

(WO1) Students should be able to write papers on topics in political science that (a) exhibit clear prose and correct grammar and (b) present a central argument in a clear and coherent structure or fashion.

Critical Thinking Outcome

(CTO1) Students should be able to identify and critique the assumptions, logic, and evidence in both scholarly and lay political arguments.

(CTO2) Students should be able to use empirical observations and analytical reasoning to articulate and defend compelling, non-fallacious arguments.

Outcomes Assessment Activities for the Political Science Program

The faculty of the Political Science program use a variety of methods for evaluating the student learning outcomes. These include an assessment of each student learning outcome in the political science senior seminar and a completed student exit survey in the senior seminar.

Specific Program Requirements

Students who major in Political Science must complete a minimum of 42 semester credit hours in political science. They must earn a grade of C or better in each of those courses, except POLS 498, which is graded S/U. A maximum of six credit hours of POLS 498 can be applied towards the 42 hours required for the major.

- Students seeking the Bachelor of Arts should consult the catalog for the options to complete the foreign language requirement.

Course	Title	Credits
Category		
General Education		35
Political Science Core Requirements		42
Certificate or Minor		18
General Electives		25
Total Credits		**120**

Specific Core Requirements

Course	Title	Credits
Required Courses		**21**
POLS 101	American Government (GT-SS1)	3
POLS 201	International Relations (GT-SS1)	3
POLS 202	Comparative Politics	3
POLS 250	Political Analysis & Methods I	3
POLS 251	Political Analysis & Methods II	3
POLS 370	Western Political Thought	3
POLS 493	Seminar	3
American Politics		**3**
Select one of the following:		
POLS 302	Latinos in American Democracy	3
POLS 340	Public Policy	3
POLS 350	Political Attitudes & Behavior	3
POLS 360	Media, Politics, & Power	3
POLS 411	Congress & the Presidency	3
International Relations		**3**
Select one of the following:		
POLS 305	International Conflict	3
POLS 306	Peace Studies	3
POLS 430	War & Film	3
POLS 431	Politics & Film	3
POLS 460	U.S. Foreign & Security Policy	3
Comparative Politics		**3**
Select one of the following:		
POLS 440	Nationalism & Ethnic Conflict	3
POLS 445	Economic Development	3
POLS 450	Democracy & Dictatorship	3
Internship/Research Requirement		**3**
Select 3 credit hours from one of the following:		
POLS 498	Internship	3
POLS 492	Research	3
Elective Courses		**9**
Select three Political Science Electives	You may take any lower or upper division Political Science courses that were not taken to meet the above requirements.	
Total Credits		**42**

Political Science, Bachelor of Science

The major in political science leads to the degrees of Bachelor of Arts (BA) and Bachelor of Science (BS). The political science curriculum focuses heavily on the development of analytical and communication skills – along with comprehensive knowledge of public policy, politics, current events, and history – and as such prepares undergraduates for a wide range of in the private, public, and non-profit sectors. 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 degree Programs.

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.

Student Learning Outcomes for the Political Science Program

Knowledge Outcome

(KO1) Students should have factual knowledge of many aspects of politics and government that are central objects of study in each of the subfields in political science (American politics, comparative politics, international relations, and political theory).

(KO2) Students should be able to explain core debates (or scholarly theories and perspectives) in the subfields of political science.

Writing Outcome

(WO1) Students should be able to write papers on topics in political science that (a) exhibit clear prose and correct grammar and (b) present a central argument in a clear and coherent structure or fashion.

Critical Thinking Outcome

(CTO1) Students should be able to identify and critique the assumptions, logic, and evidence in both scholarly and lay political arguments.

(CTO2) Students should be able to use empirical observations and analytical reasoning to articulate and defend compelling, non-fallacious arguments.

Outcomes Assessment Activities for the Political Science Program

The faculty of the Political Science program use a variety of methods for evaluating the student learning outcomes. These include an assessment of each student learning outcome in the political science senior seminar and a completed student exit survey in the senior seminar.

Specific Program Requirements

Students who major in Political Science must complete a minimum of 42 semester credit hours in political science. They must earn a grade of C or better in each of those courses, except POLS 498, which is graded S/U. A maximum of six credit hours of POLS 498 can be applied towards the 42 hours required for the major.

Program Overview

Course	Title	Credits
Category		
General Education		35
Political Science Core Requirements		42
Certificate or Minor		18
General Electives		25
Total Credits		**120**

Specific Core Requirements

Course	Title	Credits
Required Courses		**21**
POLS 101	American Government (GT-SS1)	3
POLS 201	International Relations (GT-SS1)	3
POLS 202	Comparative Politics	3
POLS 250	Political Analysis & Methods I	3
POLS 251	Political Analysis & Methods II	3
POLS 370	Western Political Thought	3
POLS 493	Seminar	3
American Politics		**3**
Select one of the following:		
POLS 302	Latinos in American Democracy	3
POLS 340	Public Policy	3
POLS 350	Political Attitudes & Behavior	3
POLS 360	Media, Politics, & Power	3
POLS 411	Congress & the Presidency	3
International Relations		**3**
Select one of the following:		
POLS 305	International Conflict	3
POLS 306	Peace Studies	3
POLS 430	War & Film	3
POLS 431	Politics & Film	3
POLS 460	U.S. Foreign & Security Policy	3
Comparative Politics		**3**
Select one of the following:		
POLS 440	Nationalism & Ethnic Conflict	3
POLS 445	Economic Development	3
POLS 450	Democracy & Dictatorship	3
Internship/Research Requirement		**3**
Select 3 credit hours from one of the following:		
POLS 498	Internship	3
POLS 492	Research	3
Elective Courses		**9**
Select three Political Science Electives	You may take any lower or upper division Political Science courses that were not taken to meet the above requirements.	
Total Credits		**42**

Political Science, Minor

Program Goals

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

Specific Program Requirements

Students who minor in Political Science must complete a minimum of 21 semester credit hours in political science. They must earn a grade of C or better in each of those courses, except POLS 498, which is graded S/U. A maximum of three credit hours of POLS 498 can be applied towards the 21 hours required for the minor. The following POLS classes do not count toward the minor: 270, 272, 373, 374, 375, 376, and 377.

Course	Title	Credits
POLS 101	American Government (GT-SS1)	3
POLS 201	International Relations (GT-SS1)	3
or POLS 202	Comparative Politics	
POLS 250	Political Analysis & Methods I	3
or POLS 251	Political Analysis & Methods II	
Political Science Electives		12
Total Credits		**21**

Political Science: 7-12 Teacher Preparation Concentration, Bachelor of Arts

The major in political science leads to the degrees of Bachelor of Arts (BA) and Bachelor of Science (BS). The political science curriculum focuses heavily on the development of analytical and communication skills – along with comprehensive knowledge of public policy, politics, current events, and history – and as such prepares undergraduates for a wide range of in the private, public, and non-profit sectors. 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 degree Programs.

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.

Student Learning Outcomes for the Political Science Program

Knowledge Outcome

(KO1) Students should have factual knowledge of many aspects of politics and government that are central objects of study in each of the subfields in political science (American politics, comparative politics, international relations, and political theory).

(KO2) Students should be able to explain core debates (or scholarly theories and perspectives) in the subfields of political science.

Writing Outcome

(WO1) Students should be able to write papers on topics in political science that (a) exhibit clear prose and correct grammar and (b) present a central argument in a clear and coherent structure or fashion.

Critical Thinking Outcome

(CTO1) Students should be able to identify and critique the assumptions, logic, and evidence in both scholarly and lay political arguments.

(CTO2) Students should be able to use empirical observations and analytical reasoning to articulate and defend compelling, non-fallacious arguments.

Outcomes Assessment Activities for the Political Science Program

The faculty of the Political Science program use a variety of methods for evaluating the student learning outcomes. These include an assessment of each student learning outcome in the political science senior seminar and a completed student exit survey in the senior seminar.

Specific Program Requirements

Students who major in Political Science must complete a minimum of 39 semester credit hours in political science.

The Secondary Education concentration prepares students for teaching at the middle and high school level. Students must complete the core requirements for the Political Science major, the Social Science courses required for certification, and all requirements of the Teacher Education minor and Teacher Education Program.

- Students seeking the Bachelor of Arts should consult the catalog for the options to complete the foreign language requirement.

Program Overview

Course	Title	Credits
Category		
General Education	The full General Education curriculum is 35 credits, but some of those credits will be fulfilled by other requirements. This table list the additional General Education requirements that are not covered by major and concentration areas.	26
Political Science Core Requirements		39
Other Social Science Requrements		24
Secondary & K-12 Education Minor		37
Total Credits		**126**

Specific Core Requirements

Course	Title	Credits
Required Courses		**21**
POLS 101	American Government (GT-SS1)	3
POLS 201	International Relations (GT-SS1)	3
POLS 202	Comparative Politics	3
POLS 250	Political Analysis & Methods I	3
POLS 251	Political Analysis & Methods II	3
POLS 370	Western Political Thought	3
POLS 493	Seminar	3
American Politics		**3**
Select one of the following:		
POLS 340	Public Policy	3
POLS 350	Political Attitudes & Behavior	3
POLS 360	Media, Politics, & Power	3
POLS 411	Congress & the Presidency	3
International Relations		**3**
Select one of the following:		
POLS 305	International Conflict	3
POLS 306	Peace Studies	3
POLS 430	War & Film	3
POLS 450	Democracy & Dictatorship	3
Comparative Politics		**3**

Select one of the following:		
POLS 440	Nationalism & Ethnic Conflict	3
POLS 445	Economic Development	3
POLS 450	Democracy & Dictatorship	3
Elective Courses	**You may take any lower or upper division POLS courses that were not taken to meet the above requirements.**	**9**
Total Credits		**39**

Social Science Courses Required for Certification

Course	Title	Credits
ECON 201	Principles of Macroeconomics (GT-SS1)	3
GEOG 101	Physical Geography	3
GEOG 103	World Regional Geography (GT-SS2)	3
HIST 110	World History to 1500 (GT-HI1)	3
HIST 111	World History since 1500 (GT-HI1)	3
HIST 201	U.S. History I (GT-HI1)	3
HIST 202	U.S. History II (GT-HI1)	3
POLS 102	State & Local Government	3
Total Credits		**24**

Specific Requirements for the Secondary and K-12 Teaching Endorsements/Minor

The student must complete an appropriate major and the following Education courses:

Course	Title	Credits
Select one of the following:		3
PSYC 151	Human Development (GT-SS3)	3
PSYC 251	Childhood and Adolescence	3
PSYC 342	Educational Psychology	3
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology [2]	3
ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
RDG 435	Disciplinary Literacy [3, 5]	4
Special Methods in Endorsement Areas (Prerequisites - Admission to Education) [5]		4
ED 412	Teaching Diverse Learners [4, 5]	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
or ED 489	Student Teaching K-12	
Total Credits [3]		37-40

1 Music students may take PSYC 151 Human Development (GT-SS3) (3 c.h.)or PSYC 251 Childhood and Adolescence (3 c.h.).

2 Music Education students may complete MUS 103 Music and Computer Technology I (1 c.h.) and MUS 306 Technology for Music Educators (2 c.h.) for ED 280 Educational Media and Technology (3 c.h.).

3 English/Language Arts student must also complete RDG 410 Teaching Reading (3 c.h.)

4 Physical Education students may complete EPER 465 Adapted Physical Education (3 c.h.) or ED 412 Teaching Diverse Learners (3 c.h.).

5 GPA of 2.6 required

Political Science: 7-12 Teacher Preparation Concentration, Bachelor of Science

The major in political science leads to the degrees of Bachelor of Arts (BA) and Bachelor of Science (BS). The political science curriculum focuses heavily on the development of analytical and communication skills – along with comprehensive knowledge of public policy, politics, current events, and history – and as such prepares undergraduates for a wide range of in the private, public, and non-profit sectors. 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 degree Programs.

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.

Student Learning Outcomes for the Political Science Program

Knowledge Outcome

KO1) Students should have factual knowledge of many aspects of politics and government that are central objects of study in each of the subfields in political science (American politics, comparative politics, international relations, and political theory).

(KO2) Students should be able to explain core debates (or scholarly theories and perspectives) in the subfields of political science.

Writing Outcome

(WO1) Students should be able to write papers on topics in political science that (a) exhibit clear prose and correct grammar and (b) present a central argument in a clear and coherent structure or fashion.

Critical Thinking Outcome

(CTO1) Students should be able to identify and critique the assumptions, logic, and evidence in both scholarly and lay political arguments.

(CTO2) Students should be able to use empirical observations and analytical reasoning to articulate and defend compelling, non-fallacious arguments.

Outcomes Assessment Activities for the Political Science Program

The faculty of the Political Science program use a variety of methods for evaluating the student learning outcomes. These include an assessment of each student learning outcome in the political science senior seminar and a completed student exit survey in the senior seminar.

Specific Program Requirements

Students who major in Political Science must complete a minimum of 39 semester credit hours in political science. They must earn a grade of C or better in each of those courses.

The Secondary Education concentration prepares students for teaching at the middle and high school level. Students must complete the Core Requirements for the Political Science major, the Social Science courses required for Certification, and all requirements of the Teacher Education minor and the Teacher Education Program.

Program Overview

Course	Title	Credits
Category		
General Education	The full General Education curriculum is 35 credits, but some of those credits will be fulfilled by Political Science and Other Social Science Requirements. This table lists the additional General Education requirements that are not covered by major and concentration area requirements.	26
Political Science Core Requirements		39
Other Social Science Requirements		24
Secondary & K-12 Education/Minor		37
Total Credits		**126**

Specific Core Requirements

Course	Title	Credits
Required Courses		**21**
POLS 101	American Government (GT-SS1)	3
POLS 201	International Relations (GT-SS1)	3
POLS 202	Comparative Politics	3
POLS 250	Political Analysis & Methods I	3
POLS 251	Political Analysis & Methods II	3
POLS 370	Western Political Thought	3
POLS 493	Seminar	3
American Politics		**3**
Select one of the following:		
POLS 340	Public Policy	3
POLS 350	Political Attitudes & Behavior	3
POLS 360	Media, Politics, & Power	3
POLS 411	Congress & the Presidency	3
International Relations		**3**
Select one of the following:		
POLS 305	International Conflict	3
POLS 306	Peace Studies	3
POLS 430	War & Film	3
POLS 460	U.S. Foreign & Security Policy	3
Comparative Politics		**3**
Select one of the following:		
POLS 440	Nationalism & Ethnic Conflict	3
POLS 445	Economic Development	3
POLS 450	Democracy & Dictatorship	3
Elective Courses	**You may take any lower or upper division Political Science courses that were not taken to meet the above requirements.**	**9**
Total Credits		**39**

Social Science Courses Required for Certification

Course	Title	Credits
ECON 201	Principles of Macroeconomics (GT-SS1)	3
GEOG 101	Physical Geography	3
GEOG 103	World Regional Geography (GT-SS2)	3
HIST 110	World History to 1500 (GT-HI1)	3
HIST 111	World History since 1500 (GT-HI1)	3
HIST 201	U.S. History I (GT-HI1)	3
HIST 202	U.S. History II (GT-HI1)	3
POLS 102	State & Local Government	3
Total Credits		**24**

Specific Requirements for the Secondary and K-12 Teaching Endorsements/Minor

The student must complete an appropriate major and the following Education courses:

Course	Title	Credits
Select one of the following:		3
PSYC 151	Human Development (GT-SS3)	3
PSYC 251	Childhood and Adolescence	3
PSYC 342	Educational Psychology	3
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology [2]	3
ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
RDG 435	Disciplinary Literacy [3, 5]	4
Special Methods in Endorsement Areas (Prerequisites - Admission to Education) [5]		4
ED 412	Teaching Diverse Learners [4, 5]	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
or ED 489	Student Teaching K-12	
Total Credits [3]		37-40

1. Music students may take PSYC 151 Human Development (GT-SS3) (3 c.h.)or PSYC 251 Childhood and Adolescence (3 c.h.).
2. Music Education students may complete MUS 103 Music and Computer Technology I (1 c.h.) and MUS 306 Technology for Music Educators (2 c.h.) for ED 280 Educational Media and Technology (3 c.h.).
3. English/Language Arts student must also complete RDG 410 Teaching Reading (3 c.h.)

[4] Physical Education students may complete EPER 465 Adapted Physical Education (3 c.h.) or ED 412 Teaching Diverse Learners (3 c.h.).
[5] GPA of 2.6 required

Humanities & Social Sciences, Bachelor of Arts

The Bachelor of Arts in Humanities and Social Sciences allows students to combine courses from multiple academic disciplines into a major that addresses students' personal, educational and professional goals. Upon entry to the program, students will work with the CHASS Dean's Office to develop a program proposal. The proposal will include a list of courses required to meet the requirements of the degree (core concentration courses, including HSS 499 Senior Capstone (3 c.h.), and elective courses), a senior project plan and a summary of the student's post-academic plans. The proposal must be submitted to and approved by the CHASS Dean's Office.

This program is ideal for students who have academic interests that cross three or more existing major and/or minor areas. The program is designed to allow students to develop a range of knowledge and skills that will be relevant for their future professional and post-graduate educational goals.

Student Learning Outcomes

1. Intellectual Connections: Students will develop critical thinking, communication, organizational, and problem-solving skills that allow them to see intellectual connections among various disciplinary fields.

2. Contemporary Challenges: Students will develop linkages between their individualized intellectual inquiries and related areas in terms of contemporary challenges facing individuals, communities, and societies.

3. Articulating Goals: Students will articulate their personal educational and professional goals focusing on existing and potential demand for the skills and knowledge they acquire in their degree program.

4. Future Opportunities: Students will acquire a clear understanding of future opportunities for the program that they propose.

Outcomes Assessment

At the end of their senior year, students will submit a portfolio to the CHASS Dean's Office which will include the following:

- The original proposal developed upon entry into the program used to assess outcomes 3 and 4.
- A final senior research project (under the supervision of a faculty advisor) used to assess outcomes 1 and 2.
- A senior paper analyzing the market for their area(s) of professional interest used to assess outcomes 3 and 4.
- A resume and letter of interest, or letter of application to graduate school, summarizing the relevant skills and knowledge attained through their degree program used to assess outcome 4.

Specific Program Requirements

- Students interested in pursuing a Bachelor of Arts in Humanities and Social Sciences must be, at a minimum, junior status.
- Students must schedule an interview with the CHASS Program Coordinator, who will determine the appropriateness of the Bachelor of Arts in Humanities and Social Sciences to an individual's post-graduation planning.
- Upon entry into this degree program, students must submit a proposal that includes the list of courses required to meet the requirements of the degree (developed in consultation with the CHASS Program Coordinator), a senior project plan and a summary of the student's post-academic plans.
- The degree plan will be used to determine completion of the degree requirements.
- Major core and elective requirements will be outlined in the student's degree plan, which is approved by the advisor and by the degree review committee, comprised of all CHASS department chairs.
- All courses must be approved by the advisor.
- Students must earn a C or better in all courses applicable to the major.
- MATH 101 or higher fulfills the general education math requirement for this major.
- Students may complete a minor; the minor must be approved by the advisor.
- All CSU Pueblo institutional graduation requirements apply for this degree program (minimum of 120 credit hours; minimum cumulative GPA of 2.000; minimum of 60 credit hours from a four-year institution, with 30 of these 60 coming from CSU Pueblo; completion of 40 credit hours of upper-division courses).
- Students enrolled in the Bachelor of Arts in Humanities and Social Sciences degree are exempt from obtaining a minor or completing 18 credits outside the major.

Course	Title	Credits
Required Major Core Courses [1]		18
Major Elective Requirements [2]		30
Total Credits		**48**

[1] **(18 credits minimum)** Completion of at least 18 credits in a core concentration area, including completion of HSS 499: Senior Capstone, is required. This requirement may be fulfilled by completing an existing minor program or by selecting coursework in existing academic degree programs that address the student's specific interest areas. All courses must be approved by the advisor. Student must complete a senior capstone course as part of their major core concentration requirements.
[2] **(30 credits minimum)** A student must complete at least 18 credits of upper-division credits in major elective requirements. All courses must be approved by the advisor.

Humanities & Social Sciences, Minor

Students desiring a minor in Humanities & Social Sciences must complete 18 credit hours approved by their minor area advisor. All credits counted toward the Humanities & Social Sciences minor must be from a CHASS department/program. To fulfill the minor requirements, students must include nine credits (minimum) of upper-division level courses and must earn a C or better in all courses that count toward the Humanities & Social Sciences minor.

Goals

The minor in Humanities & Social Sciences allows students to combine courses from multiple academic disciplines in the College of Humanities, Arts, & Social Sciences into a minor that addresses the students'

academic interests. This minor is ideal for students who have interests that cross multiple disciplines. The program is designed to allow students to develop a range of knowledge and skills that will be relevant for their future professional and post-graduate educational goals.

Outcomes

1. Students will develop critical thinking, communication, organizational and problem-solving skills that allow them to see intellectual connections among various disciplinary fields.
2. Students will develop linkages between their individualized intellectual inquiries and related areas in terms of contemporary challenges facing individuals, communities and societies.

Specific Program Requirements

- 18 credits total
- All credits counted toward the Humanities & Social Sciences minor must be from a CHASS department/program
- 9 credits (minimum) must be upper-division (300 to 400) level courses
- Credits that are used to fulfill general education or major requirements cannot be used to fulfill the Humanities & Social Sciences minor requirements.

Media & Entertainment Department

Media & Entertainment Department Mission

The mission of the Media & Entertainment Department is to offer a pragmatic and professionally oriented program designed to prepare majors for successful careers or graduate studies in media, entertainment, and related areas. Our teaching and learning philosophy is *theory through practice* - students practice theory and concepts in an experiential, applied learning environment.

The Media & Entertainment department supports the mission of the University by offering an applied major that integrates technological innovation and creativity with a humanities and social sciences foundation. Students are prepared for careers in media, entertainment, and related disciplines while also being given the ethical and aesthetic foundations to make those careers meaningful.

General Requirements

Majoring in Media & Entertainment leads to the Bachelor of Science (BS) degree. Students select one of five concentrations: Multimedia Journalism & Storytelling; Sports & eSports Media; Strategic Communication (Communication or Design Track); Media & Entertainment Production (Film & Video Track or Sound, Radio & Podcasting Track); and Media, Entertainment, & Arts Management. A degree in Media & Entertainment leads to careers in multimedia journalism, reporting and editing for news, feature writing, sports writing, sports production (including esports), advertising, public relations, crisis and image management, event planning and promotions, strategic communication, social media marketing, media design and sales, broadcasting and streaming, film and video production, post-production, documentary production, sound production, radio and podcasting, live entertainment, interactive media, virtual/augmented/mixed reality production, media and entertainment management, artist management, venue and facility operations, and more.

All concentrations share the same 44-hour core, comprised of:

- 32 hours of Media & Entertainment courses
- 6 hours of Applied Interdisciplinary courses (must be from a minimum of two different prefixes)
- 6 hours of Student Media practicum

Each concentration has its own specific 41-hour requirements beyond the shared core. Courses are concentration-specific and include any certificate or minor requirements and university open electives. Important concentration-specific information is highlighted below:

- Strategic Communication has two tracks within the concentration: Communication or Design
- Media & Entertainment Production has two tracks within the concentration: Film & Video or Sound, Radio, & Podcasting
- Media, Entertainment, & Arts Management requires a certificate in Foundations of Business or a minor in Business Administration

Student Media Practicum & Internship Requirements

The thrust of the Media & Entertainment Department is pragmatic; therefore, all majors must enroll in a minimum of 6 hours of SOCO Student Media practicum. Practicum courses are designed to represent real-life practice across the various creative industries and media outlets with several open to non-majors. Through SOCO Student Media, students are encouraged to develop their voice and professional content, and practice their skills. Practicum are advised by faculty with students in leadership roles. Faculty have oversight of curriculum, operations, and enrollment of all practicum. SOCO Student Media leadership positions are available on an annual basis.

Practicum courses are demanding and are unlike traditional lectures. Because of the hands-on, experiential nature of the courses, students should expect to spend considerable time outside of the class completing assignments and tasks. Students are limited to taking 3 hours of practicum per semester, unless granted permission by the department. Student Media options include 200-level general and 300-level leadership options across the student media outlets:

- **The Today and The Today Magazine** online news website and print publication serving CSU Pueblo and the community. Students cover current issues at the local and regional level and produce multimedia content for distribution across online, streaming, broadcast, and social media outlets.
- **The Revolution, REV 89 KTSC 89.5 FM** is licensed to CSU Pueblo as a non-commercial, educational radio station by the Federal Communications Commission. Students are involved in programming, production, sports and news, live events, studio production, podcasts, and other sound-related projects.
- **Digital Sandbox Film & TV** provide students the opportunity to produce live and prerecorded video/film content for streaming and on-demand distribution. Students take on various roles related to producing regular short-form and long-form content: producer, technical director, camera operator, floor director, sound mixer, audio supervisor, talent, writer, editor, and production manager.
- **SOCO Design** is the media design and advertising outlet for SOCO Student Media. Students gain valuable experience working on a variety of advertising and design projects design work for The Today Magazine, collaborative student media projects, and with other internal and external clients.
- **Internships** are not required but strongly encouraged. Students seeking an internship must have a 3.0 grade point average in their Media & Entertainment coursework. Internships are at the discretion of the department and require the submission of an internship

application and departmental approval prior to the semester start. Students may earn a maximum of 9 hours of internship credit, to be determined between the internship site and the department.

Department Goals

1. Offer a marketable and professionally credible program
   - Provide a comprehensive foundation of media practice, theory, and innovation.
   - Integrate a core that introduces students to the creative, practical, and theoretical tools used across the creative industries for content creation and communication.
   - Emphasize personal ethics and professional ethics codes.
   - Ensure curriculum and policies meets standards of the professions and industries represented.
2. Provide a student-centered experience for learning and advising
   - Create a proactive student-faculty advising and mentor experience.
   - Create a collaborative department culture.
   - Recognize student accomplishments and outstanding performance.
3. Create an applied learning environment with industry-standard technology and resources.
   - Provide access to media technology and resources for all students enrolled in Media & Entertainment and student media courses.
   - Offer a full range of applied learning opportunities in and outside of the classroom.
   - Provide opportunities for professional development opportunities that complement coursework and industry standards.
   - Create course content that is interactive, applied, and project-oriented.
4. Maintain a reputation for excellence
   - Maintain alumni relationships through an online database, guest speakers, and professional networking.
   - Conduct annual assessment of program and department objectives.
   - Integrate regular feedback from departmental Professional Advisory Council members.
   - Serve as mentors and role models for current students and alumni.
   - Develop partnerships with community and industry stakeholders.

Academic Programs

Undergraduate Programs

- Media & Entertainment: Media & Entertainment Production Concentration, Bachelor of Science (p. 301)
- Media & Entertainment: Media, Entertainment, & Arts Management Concentration, Bachelor of Science (p. 303)
- Media & Entertainment: Multimedia Journalism & Storytelling Concentration, Bachelor of Science (p. 306)
- Media & Entertainment: Sports & ESports Media Concentration, Bachelor of Science (p. 308)
- Media & Entertainment: Strategic Communication Concentration, Bachelor of Science (p. 310)

Minors

- Media & Entertainment, Minor (p. 300)

Media & Entertainment (MAE)

MAE 100 College & Career Success (GT-SS3) 1(0-2)
Fall.
Students are introduced to, and become familiar with, processes, resources, and strategies to help them succeed in their individual career fields.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

MAE 101 Media & Society (GT-SS3) 3(3-0)
Fall, Spring.
Survey course that examines the historical, sociological, economic, technological, and ethical foundations of mediated communication from a social scientific perspective.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: SS, GT-SS3)

MAE 140 Introduction to Film 3(3-0)
Spring.
Provides an introduction to the study of film as an art form and a medium of cultural communication. It is a survey of the major developments, movements, and critical approaches in cinema.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 210 Hispanic, Chicanx, & Indigenous Media 3(3-0)
As Needed.
The historical and cultural implications of the mass media's portrayal of Hispanic, Chicanx, and Indigenous communities and the extent of their media participation from colonial to contemporary times.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 211 (WS 211) Women & Media 3(3-0)
Fall.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

MAE 217 (PSYC 217, WS 217) Women & Society 3(3-0)
As Needed.
Statistical overview of the current status of women, followed by examination of theories concerning equality of the sexes.
Prerequisite: PSYC 100.
Corequisite: None.
Registration Information: None.

MAE 220 Professional Media Writing 3(3-0)
Fall, Spring.
A foundational course examining professional fact-finding, reporting and writing techniques across the primary forms of media (print, broadcast, and online).
Prerequisite: ENG 101.
Corequisite: None.
Registration Information: Permission of instructor.

MAE 230 Sound, Radio, & Podcasting Essentials 3(3-0)
Fall, Spring.
An introductory course examining audio technology and recording techniques as they apply to radio and podcasting production. Students receive instruction and hands-on experience utilizing professional-grade studio equipment.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 240 Film & Video Essentials 3(3-0)
Fall, Spring.
An introductory video course designed to provide students with an overview of field and studio production including terminology, positions, cameras, lighting, editing, and distribution.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 250 Media Design Essentials 3(3-0)
As Needed.
An introduction to professional media design concepts and techniques using industry-standard raster, vector, and layout software to achieve visual design objectives for print and digital media.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

MAE 251 Gaming & Immersive Media Essentials 3(3-0)
As Needed.
An introduction to gaming and interactive technologies and platforms through hands-on experience with fundamental coding for websites, gaming, immersive, and interactive media.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MAE 301 Theories & Research in Media 3(3-0)
As Needed.
Application of theories to mass communication and media problems. Nature of the communication process in groups and between mass media and audiences. Contribution of theoretical concepts to solving specific problems.
Prerequisite: MAE 101.
Corequisite: None.
Registration Information: Permission of instructor.

MAE 302 Audience Research & Advertising 3(3-0)
As Needed.
This course examines audience research methods and how advertisers plan and buy across media platforms to reach their target audience.
Prerequisite: MAE 101.
Corequisite: None.
Registration Information: None.

MAE 305 Scriptwriting 3(3-0)
As Needed.
Various short-form and long-form scriptwriting styles and standards are introduced for radio, podcasting, television, streaming, and film.
Prerequisite: ENG 101.
Corequisite: None.
Registration Information: Permission of instructor.

MAE 306 Performance & Acting 3(3-0)
As Needed.
Students learn how to use their voice and image effectively across a variety of productions. Content focuses on performance and acting using the voice, body, and image across sound, film, and stage productions.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 310 Evolution of Media & Creative Technologies 3(3-0)
As Needed.
From the first printing press to deep learning smart machines, this class explores the evolution of media and technologies as they relate to message delivery and creative expression.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 311 Gender & Film 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: None.

MAE 320 Reporting & Copy Writing 3(3-0)
As Needed.
Students further hone their reporting, interviewing, editing and writing skills across a range of media through hands-on experience in multimedia storytelling.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: MAE 230 and MAE 240 and MAE 250 highly recommended prerequisites, but may be taken concurrently.

MAE 321 Data Journalism & Visualization 3(3-0)
As Needed.
Students grow their data mining and investigative skills and their understanding of the importance of visual communication across media, introductory photojournalism and graphic creation.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: MAE 230 and MAE 240 highly recommended prerequisites, but may be taken concurrently.

MAE 322 Photojournalism 3(3-0)
As Needed.
Students are introduced to photography as a journalistic medium and hone their skills as visual storytellers across print and digital media.
Prerequisite: MAE 220 and MAE 250.
Corequisite: None.
Registration Information: None.

MAE 330 Sound Recording & Technology 3(3-0)
As Needed.
Multitrack recording and production concepts relevant to the role of a sound engineer are explored. Topics include microphone theory, consoles, technical standards, dynamic processing, effects, and digital audio theory.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: MAE 220 and MAE 240 and MAE 250 highly recommended prerequisites, but may be taken concurrently.

MAE 332 Critical Listening & Analysis 3(3-0)
As Needed.
This course is designed to provide students with the requisite theory and practical experience in applying listening and analytical skills to professional works of sound from the perspective of the sound engineer.
Prerequisite: MAE 230.
Corequisite: None.
Registration Information: None.

MAE 333 Live Sound Reinforcement 3(3-0)
As Needed.
An introduction to the theory, equipment, and management of live sound. Topics include sound reinforcement system technology, installation and operation, stage types, installation techniques, and design consideration.
Prerequisite: MAE 230.
Corequisite: None.
Registration Information: None.

MAE 334 Electronic Music, MIDI, & Synthesis 3(3-0)
As Needed.
Students explore the fundamental principles and application of MIDI and audio synthesis as a foundation for beat-making, music, and sonic art.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 335 Advanced Radio & Podcasting 3(3-0)
As Needed.
Advanced study and application of the theories and techniques used in the production cycle. Students engage in the recording, editing and production of advanced multi-track sessions as it applies to radio and podcasting.
Prerequisite: MAE 230.
Corequisite: None.
Registration Information: None.

MAE 340 Advanced Film & Video Production 3(3-0)
As Needed.
Advanced study and application of the theories and techniques used in the production of film and video. Students expand their skill set and are required to critically research and effectively produce high quality productions.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: MAE 220 and MAE 230 and MAE 250 highly recommended prerequisites, but may be taken concurrently.

MAE 341 Film & Video Post Production 3(3-0)
As Needed.
This course focuses on post-production for video and film with an emphasis on advanced editing techniques, effects, color, and professional delivery formats using non-linear editing software and equipment.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: MAE 220 and MAE 230 and MAE 250 highly recommended prerequisites, but may be taken concurrently.

MAE 350 Media Design & Layout 3(3-0)
As Needed.
Advanced media design concepts and techniques are explored and integrated into professional digital and print media using industry standard raster, vector, and layout software and technology.
Prerequisites: MAE 250.
Corequisites: None.
Registration Information: None.

MAE 351 Web Design & Development 3(3-0)
As Needed.
A comprehensive overview of website development through hands-on development of an interactive website.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 352 Game Design & Development I 3(3-0)
As Needed.
This project-based course explores the fundamental concepts of game design and development. Students work individually and in teams to design, implement and test a game.
Prerequisite: MAE 250 and MAE 251.
Corequisite: None.
Registration Information: None.

MAE 355 Commercial & Creative Imaging 3(3-0)
As Needed.
Photographic techniques and workflow for commercial and creative outlets are explored, including framing, editing, and preparation for digital and print media.
Prerequisites: MAE 250.
Corequisites: None.
Registration Information: None.

MAE 356 Digital Media Illustration 3(3-0)
As Needed.
An exploration of digital illustration techniques using vector and raster-based software to create original works for digital and print media.
Prerequisites: MAE 250.
Corequisites: None.
Registration Information: None.

MAE 360 Sports Reporting 3(3-0)
As Needed.
A specialized advanced journalism course addressing the interpretation and reporting of sports-based stories, information, and statistics to create professional sports articles and multimedia packages.
Prerequisite: MAE 320.
Corequisite: None.
Registration Information: None.

MAE 361 Sportscasting & Gameday Announcing 3(3-0)
As Needed.
This course examines the role of the sportscaster, shoutcaster, public address announcers, and sports information directors. Students learn and practice and how to execute a successful performance for various media.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: MAE 220 and MAE 240 and MAE 250 highly recommended prerequisites, but may be taken concurrently.

MAE 370 Social Media & Online Strategies 3(3-0)
As Needed.
An overview of social media and online platforms examining current technologies, trends, production and distribution strategies, consumption, data analysis, and ethical considerations.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 371 Public Relations 3(3-0)
As Needed.
Overview of public relations theories, strategies, and practices. Students learn how to construct strategic content using writing, images, video, and audio to message and deliver to various publics across platforms.
Prerequisite: MAE 220.
Corequisite: None.
Registration Information: MAE 230 and MAE 240 and MAE 250 highly recommended prerequisites.

MAE 372 Branding & Advertising 3(3-0)
As Needed.
Theories and strategies of branding, advertising planning, media techniques, marketing posture, and creative media buying are explored through hands-on application.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: None.

MAE 380 The Business of Media, Entertainment, & the Arts 3(3-0)
As Needed.
This course explores the business aspects and management functions unique to creative and arts-based organizations and individuals.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 381 Creative Careers & Talent Management 3(3-0)
As Needed.
Business, legal, and psychological strategies and practices are explored from the manager and artist-creator perspectives as they relate to managing creative careers.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: None.

MAE 382 Concerts, Festivals, & Events 3(3-0)
As Needed.
This course covers legal, commercial, business, and managerial aspects of domestic and international live entertainment events, with an emphasis on concerts and festivals.
Prerequisite: MAE 101 and MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: None.

MAE 401 Law, Ethics, & Regulation of Media 3(3-0)
As Needed.
This course examines the laws, regulations, and ethical considerations of media and entertainment industries in the United States.
Prerequisite: MAE 101.
Corequisite: None.
Registration Information: Permission of instructor.

MAE 405 Screenwriting 3(3-0)
As Needed.
An advanced course on script writing across genres for long-form productions.
Prerequisite: ENG 101 and MAE 240.
Corequisite: None.
Registration Information: None.

MAE 420 Advanced Reporting 3(3-0)
As Needed.
Journalism and storytelling is perfected through advanced application and practice of AP and broadcast writing styles, copy editing, and multimedia production across a variety of beats and features.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250 and MAE 320.
Corequisite: None.
Registration Information: None.

MAE 421 Public Affairs & Political Reporting 3(3-0)
As Needed.
Students delve into the world of political reporting, covering debates, keeping up with breaking news from the political campaign and presenting multimedia stories in a fair and balanced manner.
Prerequisite: MAE 230 and MAE 240 and MAE 250 and MAE 320.
Corequisite: None.
Registration Information: None.

MAE 422 Community Journalism 3(3-0)
As Needed.
Students explore the role that media plays in the maintenance of a fiscally and culturally healthy community. Special emphasis will be placed on the ethical responsibilities of hyper-local, community-centric media.
Prerequisite: MAE 230 and MAE 240 and MAE 250 and MAE 320.
Corequisite: None.
Registration Information: None.

MAE 430 Sound Recording, Mixing, & Mastering 3(3-0)
As Needed.
Multitrack record, mix, & master are explored. Concepts such as single/multiband compression & limiting equalization, effects, pitch-correction, MIDI implementation, & corrective techniques implemented at advanced level.
Prerequisites: MAE 330.
Corequisites: None.
Registration Information: None.

MAE 431 Sound for Picture 3(3-0)
As Needed.
This course focuses on location & studio multitrack sound production techniques for television, streaming, & film. Topics include location & field recording, music selection, Foley, ADR, mixing, surround sound, & sync.
Prerequisite: MAE 230.
Corequisite: None.
Registration Information: None.

MAE 434 Immersive & Game Sound Design 3(3-0)
As Needed.
An advanced sound course that explores the theoretical and applied aspects of sound in video games through conceptualization, recording, mixing, and integration into immersive environments.
Prerequisite: MAE 230.
Corequisite: None.
Registration Information: None.

MAE 440 Multi Camera Production 3(3-0)
As Needed.
An advanced production course focusing on multi camera live production terminology, roles, techniques, and practice.
Prerequisite: MAE 240.
Corequisite: None.
Registration Information: MAE 220 and MAE 230 and MAE 250 strongly recommended before or concurrently.

MAE 441 Directing & Producing 3(3-0)
As Needed.
Students learn the complex roles and responsibilities of the producer and director in media productions.
Prerequisite: MAE 240.
Corequisite: None.
Registration Information: MAE 220 and MAE 230 and MAE 250 strongly recommended before or concurrently.

MAE 442 Documentary Film Production 3(3-0)
As Needed.
Advanced production course about non-fiction formats. The course combines theory, history, and production aesthetics specific to television documentary with the opportunity to produce a documentary.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250 and MAE 341.
Corequisite: None.
Registration Information: None.

MAE 443 Narrative Film Production 3(3-0)
As Needed.
Advanced production course about narrative film formats. This course combines theory, techniques, methods, and production aesthetics specific to narrative film.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250 and MAE 341.
Corequisite: None.
Registration Information: None.

MAE 452 Game Design & Development II 3(3-0)
As Needed.
This project-based course expands on the concepts of game design and development. Students design a game using advanced multimedia assets, game theory, and coding.
Prerequisite: MAE 352.
Corequisite: None.
Registration Information: Permission of instructor.

MAE 460 Sports & Esports Production 3(3-0)
As Needed.
This course focuses on sports and esports production techniques, technologies, workflow, and roles. Students learn how to produce a sports-based event from pre-production to gameday to post-mortem review and critique.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: None.

MAE 470 Image & Influencers 3(3-0)
As Needed.
This course focuses on image brand management and strategies for developing an influential presence online. Emphasis is placed on the practical application of multimedia image branding content across social platforms.
Prerequisite: MAE 370.
Corequisite: None.
Registration Information: None.

MAE 471 Crisis Communications 3(3-0)
As Needed.
This course focuses on crisis and issues management from a strategic communications approach. Emphasis is placed on practical application of crisis communications theory and real-life case studies.
Prerequisite: MAE 370.
Corequisite: None.
Registration Information: None.

MAE 472 Nonprofit Organizations & Communication 3(3-0)
As Needed.
Strategic communication theory and techniques are used to examine the basic elements of nonprofit organizations from economic, political, and social perspectives.
Prerequisite: MAE 370.
Corequisite: None.
Registration Information: None.

MAE 475 Strategic Communication Campaigns 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: None.

MAE 480 Copyright, Licensing, & Publishing 3(3-0)
As Needed.
Course presents a historical and legal context necessary for understanding intellectual property rights in the media, entertainment, and arts industries.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 490 Special Projects (1-3 V)
As Needed.
Special Projects affords students the opportunity to concentrate for a semester on the intensive production of a professional, tangible product.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

MAE 491 Special Topics (1-3 V)
As Needed.
Special Topics allows students to explore a specific theme or issue in the field of media and entertainment.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

MAE 492 Capstone: Research & Proposal 2(2-0)
Fall, Spring.
The first of two capstone courses, students conceptualize and defend a final capstone project proposal supported by research and influenced by aspirations, skills and abilities, and purpose.
Prerequisites: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisites: None.
Registration Information: None.

MAE 493 Seminar (1-3 V)
As Needed.
This course introduces topics in a seminar format that are not offered as part of the standard curriculum.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 494 Field Experience (1-3 V)
As Needed.
Experiential learning opportunity provided by an organization with a mentoring component.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

MAE 495 Independent Study (1-3 V)
As Needed.
This course provides an opportunity for the student who wishes to undertake a well-defined, independent project under the guidance of a faculty member of his or her own choosing.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

MAE 498 Internship (1-3 V)
As Needed.
Provides professional experience in a variety of media and entertainment environments, including large corporations, media outlets, educational institutions, non-profit agencies and others.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

MAE 499 Capstone: Production & Delivery 2(2-0)
As Needed.
Students demonstrate proficiency in their field(s) through the production, presentation, distribution, and critique of their capstone project and paper. Students refine and prepare their portfolios and resumes.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250 and MAE 492.
Corequisite: None.
Registration Information: None.

Media & Entertainment, Minor

The Media & Entertainment department, as part of the School of Creativity + Practice (SoCaP), 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 media, entertainment, and related disciplines while also being given the ethical and aesthetic foundations to make those careers meaningful.

Through the School of Creativity + Practice, students can enhance their degree with a 12-hour multidisciplinary certificate in Creative Industry Essentials. The certificate is designed to provide an introduction to the tools and techniques commonly found in the creative industries.

Students are given the flexibility to customize their certificate by choosing any four courses out of a list of options from the departments within the School of Creativity + Practice.

The 18-hour Media & Entertainment minor is designed to compliment any major by preparing students for careers in a world that relies on media to communicate. Students choose 6 hours of Media & Entertainment courses in addition to the required 12 hours of foundation production and writing courses essential to media and entertainment professionals (writing, audio, video, and art & design).

Program Goals

1. Offer a marketable and professionally credible program.

- Provide a comprehensive foundation of media and entertainment theory and practice.
- Emphasize writing and multimedia production as strategic and professional communication.
- Emphasize personal ethics and professional ethics codes.
- Ensure curriculum meets standards of the professions represented.

2. Provide a student-centered experience for learning and advising.

- Create a proactive student-faculty advising experience.
- Create a collaborative department culture.
- Recognize student accomplishments and outstanding performance.

3. Create an applied learning environment with cutting-edge technology.

- Provide practical opportunities for all Media & Entertainment majors.
- Offer a full range of internships at the junior and senior level.
- Provide technology for pedagogical and professional purposes.
- Create experiential courses that are interactive, applied, and project-oriented.

4. Maintain a reputation for excellence.

- Maintain alumni relationships through an online database, guest speakers, active program advisory board, 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, entertainment, and related disciplines.
2. Students will communicate 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 concentration 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 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, practicum and professional internship evaluations, exit interviews, student employment upon graduation, and alumni feedback. Students will take part in a minimum of two formal assessment processes during their undergraduate career. The first assessment is through ARC 310, Critical Fundamental Skills Review, which is taken in the second semester of the student's sophomore year or first semester of their junior year. The second assessment occurs from ME 499, Senior Capstone Seminar and ARC 410, Senior Capstone Presentation. For both reviews, students create and present an academic portfolio of all salient work or projects completed. Department faculty review and evaluate a selection of portfolios to assess student learning.

The Media & Entertainment Department requires that the Critical Fundamental Skills Review demonstrate proficiency in the foundation courses to ensure success in advanced courses. Seniors will present an academic portfolio that demonstrates a pattern of sustained academic growth and development appropriate to the student's concentration area within the Media & Entertainment program. The academic portfolio should reflect the quality and level of professional, creative, and intellectual work undertaken by the student while in the department, relative to the qualitative, quantitative, ethical, legal, technological, and aesthetic dimensions of the field. The appropriateness of the content is dictated by the student's concentration area and is prescribed by the individual's advisor.

Specific Program Requirements

Course	Title	Credits
ARC 174	Fundamentals of Digital Media	3
Choose a minimum of three courses from the list below.		**9**
MAE 220	Professional Media Writing	3
MAE 230	Sound, Radio, & Podcasting Essentials	3
MAE 240	Film & Video Essentials	3
MAE 250	Media Design Essentials	3
Pick any 6 hours of approved Media & Entertainment courses		**6**
Total Credits		**18**

Media & Entertainment: Media & Entertainment Production Concentration, Bachelor of Science

The Media & Entertainment department, as part of the School of Creativity + Practice (SoCaP), 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 media, entertainment, and related disciplines while also being given the ethical and aesthetic foundations to make those careers meaningful.

The 85 credit major in Media & Entertainment leads to a Bachelor of Science (BS) degree in one of five concentrations:

1. Multimedia Journalism & Storytelling*
2. Sports and Esports Media*
3. Strategic Communication
4. Media & Entertainment Production*
5. Media, Entertainment, & Arts Management

*Students who major in these concentrations are not required to pursue a minor, however, it is recommended that each student discuss their career goals with their major advisor.

A degree in Media & Entertainment leads to careers in multimedia journalism, reporting and editing for news, feature writing, sports writing, sports production (including esports), advertising, public relations, crisis and image management, strategic communication, social media marketing, media design and sales, broadcasting and streaming, film and video production, post-production, documentary production, sound production, radio and podcasting, live entertainment, interactive media, virtual/augmented/mixed reality production, media and entertainment management, artist management, venue and facility operations, and more. Through our program, course, and practicum offerings, students are encouraged to explore entrepreneurial opportunities as part of their creative identity.

The Media & Entertainment department, as part of the School of Creativity + Practice (SoCaP), 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 media, entertainment, and related disciplines while also being given the ethical and aesthetic foundations to make those careers meaningful.

Through the School of Creativity + Practice, students can enhance their degree with a 12-hour multidisciplinary certificate in Creative Industry Essentials. The certificate is designed to provide an introduction to the tools and techniques commonly found in the creative industries.

Students are given the flexibility to customize their certificate by choosing any four courses out of a list of options from the departments within the School of Creativity + Practice.

The 18-hour Media & Entertainment minor is designed to compliment any major by preparing students for careers in a world that relies on media to communicate. Students choose 6 hours of Media & Entertainment courses in addition to the required 12 hours of foundation production and writing courses essential to media and entertainment professionals (writing, audio, video, and art & design).

Program Goals

1. Offer a marketable and professionally credible program.
   - Provide a comprehensive foundation of media and entertainment theory and practice.
   - Emphasize writing and multimedia production as strategic and professional communication.
   - Emphasize personal ethics and professional ethics codes.

- Ensure curriculum meets standards of the professions represented.

2. Provide a student-centered experience for learning and advising
   - Create a proactive student-faculty advising experience.
   - Create a collaborative department culture.
   - Recognize student accomplishments and outstanding performance.
3. Create an applied learning environment with cutting-edge technology.
   - Provide practical opportunities for all Media & Entertainment majors.
   - Offer a full range of internships at the junior and senior level.
   - Provide technology for pedagogical and professional purposes.
   - Create experiential courses that are interactive, applied, and project- oriented.
4. Maintain a reputation for excellence.
   - Maintain alumni relationships through an online database, guest speakers, active program advisory board, 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, entertainment, and related disciplines.
2. Students will communicate 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 concentration area that is professionally competitive for an entry-level position in their discipline.
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Outcomes Assessment Activities

Student success is measured through a variety of methods that include classroom writing and projects, portfolios of student work, practicum and professional internship evaluations, exit interviews, student employment upon graduation, course and progress reviews, and alumni feedback. Students will take part in a minimum of two formal assessment processes during their undergraduate career. The first assessment is through ARC 310, Critical Fundamental Skills Review, which is taken in the second semester of the student's sophomore year or first semester of their junior year. The second assessment occurs from ME 499, Senior Capstone Seminar and ARC 410, Senior Capstone Presentation. For both reviews, students create and present an academic portfolio of all salient work or projects completed. Department faculty review and evaluate a selection of portfolios to assess student learning.

The Media & Entertainment Department requires that the Critical Fundamental Skills Review demonstrate proficiency in the foundation courses to ensure success in advanced courses. Seniors will present a portfolio that demonstrates a pattern of sustained academic growth and development appropriate to the student's concentration area within the Media & Entertainment program. The portfolio should reflect the quality and level of professional, creative, and intellectual work undertaken by the student while in the department, relative to the qualitative, quantitative, ethical, legal, technological, and aesthetic dimensions of the field. The appropriateness of the content is dictated by the student's concentration area and is prescribed by the individual's advisor.

Specific Program Requirements

Specific General Education Requirements

University General Education requirements for this concentration require 35 credits to be earned, including one Humanities course that must be CID 103; MAE 101 cannot count towards the Social Science General Education requirement.

Specific Core Requirements

Course	Title	Credits
MAE 100	College & Career Success	1
MAE 101	Media & Society (GT-SS3) Cannot count for both social science and program requirement.	3
MAE 220	Professional Media Writing	3
MAE 230	Sound, Radio, & Podcasting Essentials	3
MAE 240	Film & Video Essentials	3
MAE 250	Media Design Essentials	3
MAE 370	Social Media & Online Strategies	3
or MAE 351	Web Design & Development	
MAE 401	Law, Ethics, & Regulation of Media	3
or MAE 480	Copyright, Licensing, & Publishing	
MAE 492	Capstone: Research & Proposal	2
MAE 499	Capstone: Production & Delivery	2
Applied Interdisciplinary Requirement Choose from the following or other approved course. Courses must have a minimum of two different prefixes.		**6**
ARC 110	Integrated Studies	3
ARC 210	ARC: Design Frameworks	3
ART 141	Drawing I: Observational Drawing	3
ART 176	Photography: Expressive Composition	3
ART 247	Ceramics I	3
CS 235	Ballet Folklorico	3
ENG 114	Introduction to Creative Writing (GT-AH1)	3
ENG 130	Introduction to Literature (GT-AH2)	3
MUS 105	Music Fundamentals & Foundations	3
MUS 125	Piano Class for Non-Majors	1
MUS 130	Guitar Class	1
MUS 202	Concert Choir	0.5-1
MUS 160 - MUS 179		1-2
Diversity & Cultural Course Choose from the following 3 or other approved Diversity & Cultural Course		**3**
MAE 210	Hispanic, Chicanx, & Indigenous Media	3
MAE 211	Women & Media	3
MAE 311	Gender & Film	3
CID 335	Gender & Communication	3
Practicum ARC 219 (0 credit hours) must be taken in any semester in which a student enrolls in Practicum.		**6**
ARC 229	Practicum: Journalism & Print Publications	1

ARC 239	Practicum: Sound, Radio, & Podcasting	1
ARC 249	Practicum: Film, Video, & Television	1
ARC 259	Practicum: Media Design & Advertising	1
ARC 329	Advanced Practicum: Journalism & Print Publication	2
ARC 339	Advanced Practicum: Sound, Radio, & Podcasting	2
ARC 349	Advanced Practicum: Film, Video, & Television	2
ARC 359	Advanced Practicum: Media Design & Advertising	2
Elective		**3**
Must be upper-division MAE Business/Theory/History course in consultation with advisor.		
Total Credits		**44**

Specific Concentration Requirements

Course	Title	Credits
Writing/Performance Requirement		**3**
MAE 305	Scriptwriting	3
MAE 306	Performance & Acting	3
MAE 405	Screenwriting	3
Management Requirement		**3**
MAE 380	The Business of Media, Entertainment, & the Arts	3
MAE 381	Creative Careers & Talent Management	3
MAE 382	Concerts, Festivals, & Events	3
MAE 441	Directing & Producing	3
Choose between the Film & Video or Sound Recording, Radio, & Podcasting Track		**12**
Film & Video Track		
MAE 341	Film & Video Post Production	3
MAE 440	Multi Camera Production	3
Advanced Production - Choose one of the following:		
MAE 340	Advanced Film & Video Production	3
MAE 442	Documentary Film Production	3
MAE 443	Narrative Film Production	3
Design Elective - Choose from the following:		
MAE 350	Media Design & Layout	3
MAE 355	Commercial & Creative Imaging	3
MAE 356	Digital Media Illustration	3
Sound Recording, Radio, & Podcasting Track		
MUS 105	Music Fundamentals & Foundations	3
or MUS 150	Music Theory I	
or MAE 332	Critical Listening & Analysis	
MAE 330	Sound Recording & Technology	3
or MAE 335	Advanced Radio & Podcasting	
or MAE 336	Audio Documentary Production	
MAE 333	Live Sound Reinforcement	3
Advanced Production - Choose one of the following:		
MAE 334	Electronic Music, MIDI, & Synthesis	3
MAE 430	Sound Recording, Mixing, & Mastering	3
MAE 431	Sound for Picture	3
MAE 434	Immersive & Game Sound Design	3
Open Elective		**23**
Total Credits		**41**

Specific Graduation Requirements

Majors are required to complete a 62 credit hour curriculum which includes:

- 38 credit hours of fundamental core classes
- 18 credit hours in concentration area
- 6 credit hours of practicum coursework

Students may not use the same credits to satisfy requirements for both major and minor degrees/certificates, or use credits taken to satisfy general education requirements.

Majors who concentrate in Media, Entertainment, & Arts Management must complete the Foundations of Business Certificate (16 c.h.) from the Hassan School of Business or an advisor-approved minor.

Majors with concentrations in Multimedia Journalism & Storytelling, Sports and Esports Media, Strategic Communication, and Media & Entertainment Production are not required to complete a certificate or minor, however, additional university electives will be required to complete the 120 credit hour requirement.

Successful Media & Entertainment majors will demonstrate sufficient knowledge, comprehension, and analytical skills by the ability to evaluate specific communication events and/or needs in the proper context of their concentration area.

Consistent with general CSU Pueblo policy, no student enrolled in MAE courses may accumulate unexcused absences, or arrive late for scheduled classes without faculty consultation.

The Media & Entertainment department believes that grades are valid indicators of student performance. Students' GPAs in the major or minor will be used by concentration area advisors for both formative and summary evaluations of majors and minors.

While it is necessary for Media & Entertainment majors and minors to meet the minimum GPA standards set by the University, it is expected that graduates will exceed these standards.

MAE 101 MEDIA & SOCIETY (3.0 c.h.), does not fulfill a social science general education requirement for Media & Entertainment majors.

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    - Maintain alumni relationships through an online database, guest speakers, active program advisory board, and professional networking.
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ART 176	Photography: Expressive Composition	3
ART 247	Ceramics I	3
CS 235	Ballet Folklorico	3
ENG 114	Introduction to Creative Writing (GT-AH1)	3
ENG 130	Introduction to Literature (GT-AH2)	3
MUS 105	Music Fundamentals & Foundations	3
MUS 125	Piano Class for Non-Majors	1
MUS 130	Guitar Class	1
MUS 202	Concert Choir	0.5-1
MUS 160 - MUS 179		1-2
Diversity & Cultural Course Choose from the following 3 or other approved Diversity & Cultural Course		**3**
MAE 210	Hispanic, Chicanx, & Indigenous Media	3
MAE 211	Women & Media	3
MAE 311	Gender & Film	3
CID 335	Gender & Communication	3
Practicum ARC 219 (0 credit hours) must be taken in any semester in which a student enrolls in Practicum.		**6**
ARC 229	Practicum: Journalism & Print Publications	1
ARC 239	Practicum: Sound, Radio, & Podcasting	1
ARC 249	Practicum: Film, Video, & Television	1
ARC 259	Practicum: Media Design & Advertising	1
ARC 329	Advanced Practicum: Journalism & Print Publication	2
ARC 339	Advanced Practicum: Sound, Radio, & Podcasting	2
ARC 349	Advanced Practicum: Film, Video, & Television	2
ARC 359	Advanced Practicum: Media Design & Advertising	2
Elective		**3**
Must be upper-division MAE Business/Theory/History course in consultation with advisor.		
Total Credits		**44**

Specific Concentration Requirements

Course	Title	Credits
Choose from the four courses below or other approved course:		**12**
MAE 380	The Business of Media, Entertainment, & the Arts	3
MAE 381	Creative Careers & Talent Management	3
MAE 382	Concerts, Festivals, & Events	3
MAE 480	Copyright, Licensing, & Publishing	3
Other Approved MAE Electives In consultation with advisor.		8
Business Related Requirements		**21**
Foundations of Business Certificate Additional 5 hours of university electives required to meet 120 hours.		16
Business Administration Minor Or other minor in consultation with advisor.		21
Total Credits		**41**

Specific Graduation Requirements

Majors are required to complete a 62 credit hour curriculum which includes:

- 38 credit hours of fundamental core classes
- 18 credit hours in concentration area
- 6 credit hours of practicum coursework

Students may not use the same credits to satisfy requirements for both major and minor degrees/certificates, or use credits taken to satisfy general education requirements.

Majors who concentrate in Media, Entertainment, & Arts Management must complete the Foundations of Business Certificate (16 c.h.) from the Hassan School of Business or an advisor-approved minor.

Majors with concentrations in Multimedia Journalism & Storytelling, Sports and Esports Media, Strategic Communication, and Media & Entertainment Production are not required to complete a certificate or minor, however, additional university electives will be required to complete the 120 credit hour requirement.

Successful Media & Entertainment majors will demonstrate sufficient knowledge, comprehension, and analytical skills by the ability to evaluate specific communication events and/or needs in the proper context of their concentration area.

Consistent with general CSU Pueblo policy, no student enrolled in MAE courses may accumulate unexcused absences, or arrive late for scheduled classes without faculty consultation.

The Media & Entertainment department believes that grades are valid indicators of student performance. Students' GPAs in the major or minor will be used by concentration area advisors for both formative and summary evaluations of majors and minors.

While it is necessary for Media & Entertainment majors and minors to meet the minimum GPA standards set by the University, it is expected that graduates will exceed these standards.

MAE 101 MEDIA & SOCIETY (3.0 c.h.), does not fulfill a social science general education requirement for Media & Entertainment majors.

Media & Entertainment: Multimedia Journalism & Storytelling Concentration, Bachelor of Science

The Media & Entertainment department, as part of the School of Creativity + Practice (SoCaP), 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 media, entertainment, and related disciplines while also being given the ethical and aesthetic foundations to make those careers meaningful.

The 85 credit major in Media & Entertainment leads to a Bachelor of Science (BS) degree in one of five concentrations:

1. Multimedia Journalism & Storytelling*
2. Sports and Esports Media*
3. Strategic Communication
4. Media & Entertainment Production*
5. Media, Entertainment, & Arts Management

*Students who major in these concentrations are not required to pursue a minor, however, it is recommended that each student discuss their career goals with their major advisor.

A degree in Media & Entertainment leads to careers in multimedia journalism, reporting and editing for news, feature writing, sports writing, sports production (including esports), advertising, public relations, crisis and image management, strategic communication, social media marketing, media design and sales, broadcasting and streaming, film and video production, post-production, documentary production, sound production, radio and podcasting, live entertainment, interactive media, virtual/augmented/mixed reality production, media and entertainment management, artist management, venue and facility operations, and more. Through our program, course, and practicum offerings, students are encouraged to explore entrepreneurial opportunities as part of their creative identity.

The Media & Entertainment department, as part of the School of Creativity + Practice (SoCaP), 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 media, entertainment, and related disciplines while also being given the ethical and aesthetic foundations to make those careers meaningful.

Through the School of Creativity + Practice, students can enhance their degree with a 12-hour multidisciplinary certificate in Creative Industry Essentials. The certificate is designed to provide an introduction to the tools and techniques commonly found in the creative industries.

Students are given the flexibility to customize their certificate by choosing any four courses out of a list of options from the departments within the School of Creativity + Practice.

The 18-hour Media & Entertainment minor is designed to compliment any major by preparing students for careers in a world that relies on media to communicate. Students choose 6 hours of Media & Entertainment courses in addition to the required 12 hours of foundation production and writing courses essential to media and entertainment professionals (writing, audio, video, and art & design).

Program Goals

1. Offer a marketable and professionally credible program.
   - Provide a comprehensive foundation of media and entertainment theory and practice.
   - Emphasize writing and multimedia production as strategic and professional communication.
   - Emphasize personal ethics and professional ethics codes.
   - Ensure curriculum meets standards of the professions represented.
2. Provide a student-centered experience for learning and advising
   - Create a proactive student-faculty advising experience.
   - Create a collaborative department culture.
   - Recognize student accomplishments and outstanding performance.
3. Create an applied learning environment with cutting-edge technology.
   - Provide practical opportunities for all Media & Entertainment majors.
   - Offer a full range of internships at the junior and senior level.
   - Provide technology for pedagogical and professional purposes.
   - Create experiential courses that are interactive, applied, and project- oriented.
4. Maintain a reputation for excellence.
   - Maintain alumni relationships through an online database, guest speakers, active program advisory board, 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, entertainment, and related disciplines.
2. Students will communicate 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 concentration 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 communication in front of an audience.

Outcomes Assessment Activities

Student success is measured through a variety of methods that include classroom writing and projects, portfolios of student work, practicum and professional internship evaluations, exit interviews, student employment

upon graduation, course and progress reviews, and alumni feedback. Students will take part in a minimum of two formal assessment processes during their undergraduate career. The first assessment is through ARC 310, Critical Fundamental Skills Review, which is taken in the second semester of the student's sophomore year or first semester of their junior year. The second assessment occurs from ME 499, Senior Capstone Seminar and ARC 410, Senior Capstone Presentation. For both reviews, students create and present an academic portfolio of all salient work or projects completed. Department faculty review and evaluate a selection of portfolios to assess student learning.

The Media & Entertainment Department requires that the Critical Fundamental Skills Review demonstrate proficiency in the foundation courses to ensure success in advanced courses. Seniors will present a portfolio that demonstrates a pattern of sustained academic growth and development appropriate to the student's concentration area within the Media & Entertainment program. The portfolio should reflect the quality and level of professional, creative, and intellectual work undertaken by the student while in the department, relative to the qualitative, quantitative, ethical, legal, technological, and aesthetic dimensions of the field. The appropriateness of the content is dictated by the student's concentration area and is prescribed by the individual's advisor.

Specific Program Requirements

Specific General Education Requirements

University General Education requirements for this concentration require 35 credits to be earned, including one Humanities course that must be CID 103; MAE 101 cannot count towards the Social Science General Education requirement.

Specific Core Requirements

Course	Title	Credits
MAE 100	College & Career Success	1
MAE 101	Media & Society (GT-SS3) Cannot count for both social science and program requirement.	3
MAE 220	Professional Media Writing	3
MAE 230	Sound, Radio, & Podcasting Essentials	3
MAE 240	Film & Video Essentials	3
MAE 250	Media Design Essentials	3
MAE 370	Social Media & Online Strategies	3
or MAE 351	Web Design & Development	
MAE 401	Law, Ethics, & Regulation of Media	3
or MAE 480	Copyright, Licensing, & Publishing	
MAE 492	Capstone: Research & Proposal	2
MAE 499	Capstone: Production & Delivery	2
Applied Interdisciplinary Requirement Choose from the following or other approved course. Courses must have a minimum of two different prefixes.		**6**
ARC 110	Integrated Studies	3
ARC 210	ARC: Design Frameworks	3
ART 141	Drawing I: Observational Drawing	3
ART 176	Photography: Expressive Composition	3
ART 247	Ceramics I	3
CS 235	Ballet Folklorico	3
ENG 114	Introduction to Creative Writing (GT-AH1)	3
ENG 130	Introduction to Literature (GT-AH2)	3
MUS 105	Music Fundamentals & Foundations	3
MUS 125	Piano Class for Non-Majors	1
MUS 130	Guitar Class	1
MUS 202	Concert Choir	0.5-1
MUS 160 - MUS 179		1-2
Diversity & Cultural Course Choose from the following 3 or other approved Diversity & Cultural Course		**3**
MAE 210	Hispanic, Chicanx, & Indigenous Media	3
MAE 211	Women & Media	3
MAE 311	Gender & Film	3
CID 335	Gender & Communication	3
Practicum ARC 219 (0 credit hours) must be taken in any semester in which a student enrolls in Practicum.		**6**
ARC 229	Practicum: Journalism & Print Publications	1
ARC 239	Practicum: Sound, Radio, & Podcasting	1
ARC 249	Practicum: Film, Video, & Television	1
ARC 259	Practicum: Media Design & Advertising	1
ARC 329	Advanced Practicum: Journalism & Print Publication	2
ARC 339	Advanced Practicum: Sound, Radio, & Podcasting	2
ARC 349	Advanced Practicum: Film, Video, & Television	2
ARC 359	Advanced Practicum: Media Design & Advertising	2
Elective		**3**
Must be upper-division MAE Business/Theory/History course in consultation with advisor.		
Total Credits		**44**

Specific Concentration Requirements

Course	Title	Credits
MAE 320	Reporting & Copy Writing	3
MAE 321	Data Journalism & Visualization	3
MAE 322	Photojournalism	3
or MAE 355	Commercial & Creative Imaging	
MAE 420	Advanced Reporting	3
Specialty Reporting/Writing/Production Elective In consultation with advisor.		3
Advanced Design Course In consultation with advisor.		3
MAE 350	Media Design & Layout	3
MAE 355	Commercial & Creative Imaging	3
MAE 356	Digital Media Illustration	3
Open electives		23
Total Credits		**41**

Specific Graduation Requirements

Majors are required to complete a 62 credit hour curriculum which includes:

- 38 credit hours of fundamental core classes
- 18 credit hours in concentration area
- 6 credit hours of practicum coursework
- Students may not use the same credits to satisfy requirements for both major and minor degrees/certificates, or use credits taken to satisfy general education requirements.

Majors who concentrate in Media, Entertainment, & Arts Management must complete the Foundations of Business Certificate (16 c.h.) from the Hassan School of Business or an advisor-approved minor.

Majors with concentrations in Multimedia Journalism & Storytelling, Sports and Esports Media, Strategic Communication, and Media & Entertainment Production are not required to complete a certificate or minor, however, additional university electives will be required to complete the 120 credit hour requirement.

Successful Media & Entertainment majors will demonstrate sufficient knowledge, comprehension, and analytical skills by the ability to evaluate specific communication events and/or needs in the proper context of their concentration area.

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The Media & Entertainment department believes that grades are valid indicators of student performance. Students' GPAs in the major or minor will be used by concentration area advisors for both formative and summary evaluations of majors and minors.

While it is necessary for Media & Entertainment majors and minors to meet the minimum GPA standards set by the University, it is expected that graduates will exceed these standards.

MAE 101 MEDIA & SOCIETY (3.0 c.h.), does not fulfill a social science general education requirement for Media & Entertainment majors.

Media & Entertainment: Sports & ESports Media Concentration, Bachelor of Science

The Media & Entertainment department, as part of the School of Creativity + Practice (SoCaP), 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 media, entertainment, and related disciplines while also being given the ethical and aesthetic foundations to make those careers meaningful.

The 85 credit major in Media & Entertainment leads to a Bachelor of Science (BS) degree in one of five concentrations:

1. Multimedia Journalism & Storytelling*
2. Sports and Esports Media*
3. Strategic Communication
4. Media & Entertainment Production*
5. Media, Entertainment, & Arts Management

*Students who major in these concentrations are not required to pursue a minor, however, it is recommended that each student discuss their career goals with their major advisor.

A degree in Media & Entertainment leads to careers in multimedia journalism, reporting and editing for news, feature writing, sports writing, sports production (including esports), advertising, public relations, crisis and image management, strategic communication, social media marketing, media design and sales, broadcasting and streaming, film and video production, post-production, documentary production, sound production, radio and podcasting, live entertainment, interactive media, virtual/augmented/mixed reality production, media and entertainment management, artist management, venue and facility operations, and more. Through our program, course, and practicum offerings, students are encouraged to explore entrepreneurial opportunities as part of their creative identity.

The Media & Entertainment department, as part of the School of Creativity + Practice (SoCaP), 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 media, entertainment, and related disciplines while also being given the ethical and aesthetic foundations to make those careers meaningful.

Through the School of Creativity + Practice, students can enhance their degree with a 12-hour multidisciplinary certificate in Creative Industry Essentials. The certificate is designed to provide an introduction to the tools and techniques commonly found in the creative industries.

Students are given the flexibility to customize their certificate by choosing any four courses out of a list of options from the departments within the School of Creativity + Practice.

The 18-hour Media & Entertainment minor is designed to compliment any major by preparing students for careers in a world that relies on media to communicate. Students choose 6 hours of Media & Entertainment courses in addition to the required 12 hours of foundation production and writing courses essential to media and entertainment professionals (writing, audio, video, and art & design).

Program Goals

1. Offer a marketable and professionally credible program.
   - Provide a comprehensive foundation of media and entertainment theory and practice.
   - Emphasize writing and multimedia production as strategic and professional communication.
   - Emphasize personal ethics and professional ethics codes.
   - Ensure curriculum meets standards of the professions represented.
2. Provide a student-centered experience for learning and advising
   - Create a proactive student-faculty advising experience.
   - Create a collaborative department culture.
   - Recognize student accomplishments and outstanding performance.
3. Create an applied learning environment with cutting-edge technology.
   - Provide practical opportunities for all Media & Entertainment majors.
   - Offer a full range of internships at the junior and senior level.
   - Provide technology for pedagogical and professional purposes.
   - Create experiential courses that are interactive, applied, and project- oriented.
4. Maintain a reputation for excellence.
   - Maintain alumni relationships through an online database, guest speakers, active program advisory board, 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, entertainment, and related disciplines.
2. Students will communicate 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 concentration 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 communication in front of an audience.

Outcomes Assessment Activities

Student success is measured through a variety of methods that include classroom writing and projects, portfolios of student work, practicum and professional internship evaluations, exit interviews, student employment upon graduation, course and progress reviews, and alumni feedback. Students will take part in a minimum of two formal assessment processes during their undergraduate career. The first assessment is through ARC 310, Critical Fundamental Skills Review, which is taken in the second semester of the student's sophomore year or first semester of their junior year. The second assessment occurs from ME 499, Senior Capstone Seminar and ARC 410, Senior Capstone Presentation. For both reviews, students create and present an academic portfolio of all salient work or projects completed. Department faculty review and evaluate a selection of portfolios to assess student learning.

The Media & Entertainment Department requires that the Critical Fundamental Skills Review demonstrate proficiency in the foundation courses to ensure success in advanced courses. Seniors will present a portfolio that demonstrates a pattern of sustained academic growth and development appropriate to the student's concentration area within the Media & Entertainment program. The portfolio should reflect the quality and level of professional, creative, and intellectual work undertaken by the student while in the department, relative to the qualitative, quantitative, ethical, legal, technological, and aesthetic dimensions of the field. The appropriateness of the content is dictated by the student's concentration area and is prescribed by the individual's advisor.

Specific Program Requirements

Specific General Education Requirements

University General Education requirements for this concentration require 35 credits to be earned, including one Humanities course that must be CID 103; MAE 101 cannot count towards the Social Science General Education requirement.

Specific Core Requirements

Course	Title	Credits
MAE 100	College & Career Success	1
MAE 101	Media & Society (GT-SS3) Cannot count for both social science and program requirement.	3
MAE 220	Professional Media Writing	3
MAE 230	Sound, Radio, & Podcasting Essentials	3
MAE 240	Film & Video Essentials	3
MAE 250	Media Design Essentials	3
MAE 370	Social Media & Online Strategies	3
or MAE 351	Web Design & Development	
MAE 401	Law, Ethics, & Regulation of Media	3
or MAE 480	Copyright, Licensing, & Publishing	
MAE 492	Capstone: Research & Proposal	2
MAE 499	Capstone: Production & Delivery	2
Applied Interdisciplinary Requirement Choose from the following or other approved course. Courses must have a minimum of two different prefixes.		**6**
ARC 110	Integrated Studies	3
ARC 210	ARC: Design Frameworks	3
ART 141	Drawing I: Observational Drawing	3
ART 176	Photography: Expressive Composition	3
ART 247	Ceramics I	3
CS 235	Ballet Folklorico	3
ENG 114	Introduction to Creative Writing (GT-AH1)	3
ENG 130	Introduction to Literature (GT-AH2)	3
MUS 105	Music Fundamentals & Foundations	3
MUS 125	Piano Class for Non-Majors	1
MUS 130	Guitar Class	1
MUS 202	Concert Choir	0.5-1
MUS 160 - MUS 179		1-2
Diversity & Cultural Course Choose from the following 3 or other approved Diversity & Cultural Course		**3**
MAE 210	Hispanic, Chicanx, & Indigenous Media	3
MAE 211	Women & Media	3
MAE 311	Gender & Film	3
CID 335	Gender & Communication	3
Practicum ARC 219 (0 credit hours) must be taken in any semester in which a student enrolls in Practicum.		**6**
ARC 229	Practicum: Journalism & Print Publications	1
ARC 239	Practicum: Sound, Radio, & Podcasting	1
ARC 249	Practicum: Film, Video, & Television	1
ARC 259	Practicum: Media Design & Advertising	1
ARC 329	Advanced Practicum: Journalism & Print Publication	2
ARC 339	Advanced Practicum: Sound, Radio, & Podcasting	2
ARC 349	Advanced Practicum: Film, Video, & Television	2
ARC 359	Advanced Practicum: Media Design & Advertising	2
Elective		**3**
Must be upper-division MAE Business/Theory/History course in consultation with advisor.		
Total Credits		**44**

Specific Concentration Requirements

Course	Title	Credits
MAE 320	Reporting & Copy Writing	3
MAE 360	Sports Reporting	3
PSYC 205	Introduction to Sport Psychology	3

EPER 470	Methods of Coaching (or other approved coaching course)	3
Supporting Media Courses	Select one of the following:	3
MAE 322	Photojournalism	3
MAE 355	Commercial & Creative Imaging	3
MAE 361	Sportscasting & Gameday Announcing	3
MAE 460	Sports & Esports Production	3
Other approved journalism, writing, or production course.		3
Open electives		23
Total Credits		**41**

Specific Graduation Requirements

Majors are required to complete a 62 credit hour curriculum which includes:

- 38 credit hours of fundamental core classes
- 18 credit hours in concentration area
- 6 credit hours of practicum coursework

Students may not use the same credits to satisfy requirements for both major and minor degrees/certificates, or use credits taken to satisfy general education requirements.

Majors who concentrate in Media, Entertainment, & Arts Management must complete the Foundations of Business Certificate (16 c.h.) from the Hassan School of Business or an advisor-approved minor.

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While it is necessary for Media & Entertainment majors and minors to meet the minimum GPA standards set by the University, it is expected that graduates will exceed these standards.

MAE 101 MEDIA & SOCIETY (3.0 c.h.), does not fulfill a social science general education requirement for Media & Entertainment majors.

Media & Entertainment: Strategic Communication Concentration, Bachelor of Science

The Media & Entertainment department, as part of the School of Creativity + Practice (SoCaP), 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 media, entertainment, and related disciplines while also being given the ethical and aesthetic foundations to make those careers meaningful.

The 85 credit major in Media & Entertainment leads to a Bachelor of Science (BS) degree in one of five concentrations:

1. Multimedia Journalism & Storytelling*
2. Sports and Esports Media*
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4. Media & Entertainment Production*
5. Media, Entertainment, & Arts Management

*Students who major in these concentrations are not required to pursue a minor, however, it is recommended that each student discuss their career goals with their major advisor.

A degree in Media & Entertainment leads to careers in multimedia journalism, reporting and editing for news, feature writing, sports writing, sports production (including esports), advertising, public relations, crisis and image management, strategic communication, social media marketing, media design and sales, broadcasting and streaming, film and video production, post-production, documentary production, sound production, radio and podcasting, live entertainment, interactive media, virtual/augmented/mixed reality production, media and entertainment management, artist management, venue and facility operations, and more. Through our program, course, and practicum offerings, students are encouraged to explore entrepreneurial opportunities as part of their creative identity.

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Students are given the flexibility to customize their certificate by choosing any four courses out of a list of options from the departments within the School of Creativity + Practice.

The 18-hour Media & Entertainment minor is designed to compliment any major by preparing students for careers in a world that relies on media to communicate. Students choose 6 hours of Media & Entertainment courses in addition to the required 12 hours of foundation production and writing courses essential to media and entertainment professionals (writing, audio, video, and art & design).

Program Goals

1. Offer a marketable and professionally credible program.
    - Provide a comprehensive foundation of media and entertainment theory and practice.
    - Emphasize writing and multimedia production as strategic and professional communication.

- Emphasize personal ethics and professional ethics codes.
- Ensure curriculum meets standards of the professions represented.

2. Provide a student-centered experience for learning and advising
   - Create a proactive student-faculty advising experience.
   - Create a collaborative department culture.
   - Recognize student accomplishments and outstanding performance.
3. Create an applied learning environment with cutting-edge technology.
   - Provide practical opportunities for all Media & Entertainment majors.
   - Offer a full range of internships at the junior and senior level.
   - Provide technology for pedagogical and professional purposes.
   - Create experiential courses that are interactive, applied, and project- oriented.
4. Maintain a reputation for excellence.
   - Maintain alumni relationships through an online database, guest speakers, active program advisory board, 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, entertainment, and related disciplines.
2. Students will communicate 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 concentration area that is professionally competitive for an entry-level position in their discipline.
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Outcomes Assessment Activities

Student success is measured through a variety of methods that include classroom writing and projects, portfolios of student work, practicum and professional internship evaluations, exit interviews, student employment upon graduation, course and progress reviews, and alumni feedback. Students will take part in a minimum of two formal assessment processes during their undergraduate career. The first assessment is through ARC 310, Critical Fundamental Skills Review, which is taken in the second semester of the student's sophomore year or first semester of their junior year. The second assessment occurs from ME 499, Senior Capstone Seminar and ARC 410, Senior Capstone Presentation. For both reviews, students create and present an academic portfolio of all salient work or projects completed. Department faculty review and evaluate a selection of portfolios to assess student learning.

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Specific Program Requirements

Specific General Education Requirements

University General Education requirements for this concentration require 35 credits to be earned, including one Humanities course that must be CID 103; MAE 101 cannot count towards the Social Science General Education requirement.

Specific Core Requirements

Course	Title	Credits
MAE 100	College & Career Success	1
MAE 101	Media & Society (GT-SS3) Cannot count for both social science and program requirement.	3
MAE 220	Professional Media Writing	3
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MAE 240	Film & Video Essentials	3
MAE 250	Media Design Essentials	3
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or MAE 351	Web Design & Development	
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MAE 492	Capstone: Research & Proposal	2
MAE 499	Capstone: Production & Delivery	2
Applied Interdisciplinary Requirement Choose from the following or other approved course. Courses must have a minimum of two different prefixes.		**6**
ARC 110	Integrated Studies	3
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ART 141	Drawing I: Observational Drawing	3
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MUS 125	Piano Class for Non-Majors	1
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MUS 202	Concert Choir	0.5-1
MUS 160 - MUS 179		1-2
Diversity & Cultural Course Choose from the following 3 or other approved Diversity & Cultural Course		**3**
MAE 210	Hispanic, Chicanx, & Indigenous Media	3
MAE 211	Women & Media	3
MAE 311	Gender & Film	3
CID 335	Gender & Communication	3
Practicum ARC 219 (0 credit hours) must be taken in any semester in which a student enrolls in Practicum.		**6**
ARC 229	Practicum: Journalism & Print Publications	1

ARC 239	Practicum: Sound, Radio, & Podcasting	1
ARC 249	Practicum: Film, Video, & Television	1
ARC 259	Practicum: Media Design & Advertising	1
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ARC 349	Advanced Practicum: Film, Video, & Television	2
ARC 359	Advanced Practicum: Media Design & Advertising	2
Elective		**3**
Must be upper-division MAE Business/Theory/History course in consultation with advisor.		
Total Credits		**44**

Specific Concentration Requirements

Course	Title	Credits
MAE 320	Reporting & Copy Writing	3
MAE 371	Public Relations	3
MAE 372	Branding & Advertising	3
MAE 475	Strategic Communication Campaigns	3
Communication or Design Focus Choose 6 hours from one focus area or across both areas.		**6**
Communication Focus		
MAE 470	Image & Influencers	3
MAE 471	Crisis Communications	3
MAE 472	Nonprofit Organizations & Communication	3
Design Focus		
MAE 350	Media Design & Layout	3
MAE 355	Commercial & Creative Imaging	3
MAE 356	Digital Media Illustration	3
Additional Electives		23
Total Credits		**41**

Majors are required to complete a 64 credit hour curriculum which includes:

- 29 credit hours of fundamental core classes
- 11 credit hours of ARC coursework
- 18 credit hours in concentration area
- 6 credit hours of practicum coursework
- Students may not use the same credits to satisfy requirements for both major and minor degrees/certificates, or use credits taken to satisfy general education requirements.

Majors who concentrate in Strategic Communication must complete the Communication & Information Design certificate (9 c.h.) from the Department of English and World Languages or the Communication & Information Design Minor (18 c.h.). Completing the COMID minor will reduce total number of additional University Electives to 3 hours.

Majors who concentrate in Media, Entertainment, & Arts Management must complete the Foundations of Business Certificate (16 c.h.) from the Hassan School of Business or an advisor-approved minor.

Majors with concentrations in Multimedia Journalism & Storytelling, Sports and Esports Media, and Media & Entertainment Production are not required to complete a minor, however, additional university electives will be required to complete the 120 credit hour requirement.

Successful Media & Entertainment majors will demonstrate sufficient knowledge, comprehension and analytical skills by the ability to evaluate specific communication events in the proper context of their concentration area.

Each faculty member will keep, in the department's central file, a set of course outlines or syllabi that list the objectives and skills achieved during the term. This central pool of materials describes the detailed expectations and accountability elements for the M&E major on a course-by-course basis.

Consistent with general CSU Pueblo policy, no student enrolled in ME courses may accumulate unexcused absences, or arrive late for scheduled classes without faculty consultation.

The Media & Entertainment department believes that grades are valid indicators of student performance. Students' GPAs in the major or minor will be used by concentration area advisors for both formative and summary evaluations of majors and minors.

While it is necessary for Media & Entertainment majors and minors to meet the minimum GPA standards set by the University, it is expected that graduates will exceed these standards.

ME 101 MEDIA & SOCIETY (3.0 c.h.), does not fulfill a social science general education requirement for Media & Entertainment majors.

Military Science, Minor

The Army ROTC Program

The focus of this program is to recruit, develop, and commission college-educated men and women to serve as officers in the United States Army. Participants in the program are commissioned as a Second Lieutenants in the Army upon graduation with a bachelor's degree. They will 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 Army and civilian leadership components. All courses of instruction enhance leadership and management qualities as well as improve self-confidence and initiative of each student.

Military Science courses are taken in addition to the required courses for each student's major.

Reserve Officers' Training Corps Program (ROTC) is a four-year program that is divided into two phases: the basic course and the advanced course.

Scholarship Information

The Army ROTC Scholarship Program provides merit-based 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 covers tuition and mandatory fees, $1200 annual book allowance, and provides the student with a monthly, tax-free stipend of $420 per month for up to ten months per year (depending on academic status). For more information pertaining to scholarships and enrollment eligibility, please contact Mr. Don Caughey at (719) 255-3475 or dcaughey@uccs.edu.

Military Science & Leadership Student Learning Outcomes

- Students will demonstrate proficiency in small unit leadership by applying the 23 leadership dimensions.
- Meet or exceed the standard of the Army Physical Fitness Test (APFT) and make a commitment to optimal health and physical well being as a way of life. Students must also meet and adhere to the Army height/weight standards and authorized body fat percentages.
- Demonstrate the ability to lead alongside with the seven Army values of loyalty, duty, respect, selfless-service, honor, integrity, and personal courage.
- Demonstrate the understanding of customs and courtesies of the U.S. Army and Army's role in supporting the orders of superiors culminating with the Commander in Chief of the U.S. Army.
- All students will demonstrate various understanding of leadership and management skills in correlation to their academic year progression.
- In their junior year students will attend the Cadet Leader Course to be developed, assessed, and compared to all Army ROTC cadets in the nation.

Military Science Outcomes

- After completing ROTC, Second Lieutenants will have demonstrated proficiency in six areas: Live Honorably and Build Trust; Develop, Lead, and Inspire; Demonstrate Intellectual, Military, and Physical Competence; Think Critically and Creatively; Make Sound and Timely Decisions; Communicate and Interact Effectively, and Pursue Excellence and Continue to Grow.
- The Student will graduate with a bachelor's degree, commission as a Second Lieutenant into the United States Army, and commit to serving eight years. The eight years will either be four years in the Active Army and four years in the Individual Ready Reserve or six years in the National Guard/Army Reserve and two years in the Individual Ready Reserve.

Outcomes Assessment Activities

Student success is measured through a variety of methods that include classroom work, Army Physical Fitness Test (APFT), Army Height and Weight Standards, Leadership Evaluations, complete and pass Cadet Leader Course.

- Students must pass or exceed the APFT each semester, as they progress higher in the MSL courses they must pass the APFT consistently and should progressively achieve a higher score.
- Parallel with APFT students must pass the Army Height and Weight standards.
- In their junior (MSL 301 Adaptive Tactical Leadership (3 c.h.)/MSL 302 Leadership in Changing Environmens (3 c.h.)) year students are placed in leadership positions where they are evaluated in their leadership skills to include the 23 leadership dimensions and the seven Army values.
- After completion of MSL 302 Leadership in Changing Environmens (3 c.h.) (spring semester) students must attend and complete the Cadet Leader Course. It is a 29-day fully immersed assessment process that covers everything that was learned and evaluated since the cadet's freshman year. Students are subjected to high stress scenarios and placed in critical leadership roles that will further develop and assess an individual's ability to lead and serve as an officer in the United States Army.

Specific Program Requirements

Specific Lower Division Requirements

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 physical training is required for successful course completion.

There is no military obligation for participation in the Basic Course unless a student is receiving an Army ROTC Scholarship.

Course	Title	Credits
MSL 101	Leadership and Personal Development	3
MSL 102	Introduction to Tactical Leadership	3
MSL 201	Innovative Team Leadershp	3
MSL 202	Foundations of Tactical Leadership	3

Specific Upper Division Requirements

The Advanced Course

The Advanced Course (MSL 300/400 level courses) prepares 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 to build on 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 coursework before graduation to participate in the Advanced Course, and they must be in a full-time status (12 credit hours per semester, including ROTC) during each of those semesters.

Entry into the Advanced Course

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 classes (MSL 101 Leadership and Personal Development (3 c.h.), MSL 102 Introduction to Tactical Leadership (3 c.h.), MSL 201 Innovative Team Leadershp (3 c.h.), MSL 202 Foundations of Tactical Leadership (3 c.h.)) 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.

Advanced Camp

Students participating in the Advance Course will be required to attend the MSL 303 Advanced Camp (6 c.h.) which is conducted annually at Fort Knox, Kentucky. This camp is normally attended during the summer between a student's junior and senior year. It is a 29-day event that provides the best possible professional training, development, and assessment for all students participating in ROTC before commissioning. The course mission includes continued military training, but the primary

focus is to assess each cadet's leadership development and provide feedback to enable continued growth through the senior year. This course represents the only opportunity in ROTC to gather all qualified students from the 273 colleges and universities across the nation on one “level playing field” for the purpose of making those assessments. Successful completion of Advanced Camp is mandatory for commissioning.

Course	Title	Credits
MSL 301	Adaptive Tactical Leadership	3
MSL 302	Leadership in Changing Environmens	3
MSL 303	Advanced Camp	6
MSL 401	Developing Adaptive Leaders	3
MSL 402	Leadership in a Complex World	3

18 credit hours of upper-division (300+ level) Military Science coursework. All courses must be completed with a grade of C or better. A minor in Military Science is available for students participating in the Army ROTC Program. Students must achieve a minimum of 30 credit hours by graduation, which includes credit for all Advanced Course classes (to include graduation from Advanced Camp) and the Professional Military Education (PME) requirements. Students may be granted waivers for requirements of the MSL 101 Leadership and Personal Development (3 c.h.) - MSL 202 Foundations of Tactical Leadership (3 c.h.) courses for prior military service by the Assistant Professor of Military Science. More information about the minor is available through the College of Humanities, Arts and Social Sciences and the Military Science Minor.

Students may take the 1-credit MSL 485: Special Studies in Leadership course as an extra elective option for the minor; however this credit is not included as part of the 30 required credits for the minor. Nursing students are required to complete the 3-credit MSL 304: Military Science and Leadership Army ROTC Nurse Summer Training Program (NSTP) course as part of the MSL minor. With this course requirement, nursing students will earn 33 credits upon completion of the minor.

Specific 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
- Remain a full-time student (12 credit hours or greater) in good academic standing.
- Initiate a security clearance investigation within 60 days from signing a ROTC contract to meet pre-commissioning requirements.
- Must pass the Combat Water Survival Test.

Museum Studies, Minor

Museum Studies Minor

The minor in museum studies offers students the foundational skills and knowledge required for museum work and for graduate study in related areas. The minor includes museum internships and courses from a breadth of fields that are relevant to various aspects of museum work from marketing to curating. The minor is designed to complement a variety of major areas of study including Art, Art History, Education, History, Media Communication, and Anthropology.

Specific Program Requirements

Course	Title	Credits
Required Courses		**6**
MST 300	Museum Ethics & Issues	3
HIST 498	Internship	3
or ART 494	Field Experience	
Electives	**To be selected in consultation with minor advisor.**	**15**
ANTH 103	Introduction to Archaeology	3
ANTH 105	Understanding Human Diversity	3
ANTH 340	Museum Conservation	3
ARC 174	Fundamentals of Digital Media	3
ARC 483	Art for the Internet	3
ARC 485	Interdisciplinary Media & Performance	3
ARH 211	Global Art I (GT-AH1)	3
ARH 212	Global Art II (GT-AH1)	3
ARH 413	Native American Art	3
ART 383	Exhibition Design	2
CS 136	The Southwest United States (GT-HI1)	3
CID 205	Introduction to User Experience	3
CID 345	Intercultural Communication	3
DS 202	Disability, Age, Religion & Inclusivity	3
ENG 114	Introduction to Creative Writing (GT-AH1)	3
ENG 302	Grant Writing	3
HIST 312	Colorado History	3
MAE 210	Hispanic, Chicanx, & Indigenous Media	3
MAE 211	Women & Media	3
MAE 220	Professional Media Writing	3
MAE 230	Sound, Radio, & Podcasting Essentials	3
MAE 380	The Business of Media, Entertainment, & the Arts	3
MGMT 201	Principles of Management	3
MKTG 340	Principles of Marketing	3
HIST 498	Internship	3
or ART 494	Field Experience	
Total Credits		**21**

Music Department

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, & 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.

Degree in Music

The general Bachelor of Arts in Music provides a broad base for a number of careers in music such as private studio teaching, and is intended as preparation for advanced graduate study.

The Bachelor of Arts in Music: Music Performance Concentration is appropriate for those students who plan to perform, teach privately, or pursue further study at the graduate level.

The Bachelor of Arts in Music: Music Education Concentration 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 in choral, instrumental, and general music.

The University also offers the traditional liberal arts Minor in Music suited for students in majors other than Music desiring a foundational curriculum in Music. The Minor in Audio Production is open to students in all majors (including Music) who have a strong background in music fundamentals (basic performance, musical notation and theory). The Minor in Composition/Music Theory, Minor in Jazz Studies, Minor in Piano Pedagogy (p. 343), and the Minor in Organ Performance Studies are primarily intended as concentration areas of study for students in BA-Music (General or Performance concentration) majors, but are open to students in any major satisfying course prerequisites.

Master of Education/Music Concentration

Refer to Department of Education requirements for admission to the Master of Education degree program. 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.

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.

Academic Programs

Undergraduate Programs

- Music, Bachelor of Arts (p. 334)
- Music: K-12 Teacher Preparation Concentration, Bachelor of Arts (p. 337)
- Music: Music Performance Concentration, Bachelor of Arts (p. 340)

Minors

- Composition/Music Theory, Minor (p. 334)
- Jazz Studies, Minor (p. 334)
- Music, Minor (p. 337)
- Organ Performance Studies, Minor (p. 343)
- Piano Pedagogy, Minor (p. 343)

Music (MUS)

MUS 100 Music Fundamentals I: Notation 2(2-0)
As Needed.
An overview of the basic elements and principles of music notation and their application to performance.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 101 Music Performance Symposium I (1 V)
Fall, Spring.
Level one course in observation and critique of music performances, includes lectures, clinics, demonstrations, and performance preparation.
Prerequisite: None.
Corequisite: None.
Registration Information: Weekly critiques required for credit. Repeatable (2).

MUS 103 Music and Computer Technology I 1(1-0)
Fall, Spring.
Introduction to the use of computer technology in music, including digital audio, MIDI, composing, sequencing, performing, and printing, utilizing various software applications.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MUS 105 Music Fundamentals & Foundations 3(3-0)
As Needed.
A study of the basic principles of music theory relating to musical composition. Prepares students for success in the Music Theory sequence and creative industries.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 110 Music and Audio Production I 2(2-0)
Fall, Spring.
Introduces principals of music and audio recording, editing, mixing and mastering using computer-based Digital Audio Workstation software.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of Instructor.

MUS 113 Vocal Techniques and Diction 1(0-2)
Fall, Spring.
Instruction in the fundamentals of singing from a pedagogical approach. Additional basic instruction in foreign language pronunciation.
Prerequisite: None.
Corequisite: None.
Registration Information: Primarily intended for students in Music Education.

MUS 118 Music Appreciation (GT-AH1) 3(3-0)
Fall, Spring.
Significant musical compositions, composers and historical eras; analysis and description of music forms and terms; includes women composers and multi-cultural issues.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH1) (CC)

MUS 120 History of Jazz 2(2-0)
As Needed.
Study of historical trends and developments in jazz, including significant performers, styles, composers, and compositions.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 125 Piano Class for Non-Majors 1(0-2)
Fall, Spring.
An elective course for the piano beginner or intermediate player who wishes to increase personal skill at the keyboard.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (2).

MUS 127 Functional Piano I: Beginning 1(0-2)
Fall, Spring.
For students with no piano experience. Introduces fundamentals, with emphasis on providing skills necessary for successful completion of the Proficiency Exam.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (2).

MUS 130 Guitar Class 1(0-2)
As Needed.
Basic instruction in guitar technique in a group setting. Application of both melodic and chordal (rhythmic) media.
Prerequisite: None.
Corequisite: None.
Registration Information: Primarily for the non-music major/minor. Repeatable (99).

MUS 150 Music Theory I 3(3-0)
Fall.
A comprehensive review of all music theory fundamentals leading to diatonic harmony and four-part writing based on 18th century "common practice".
Prerequisite: None.
Corequisite: None.
Registration Information: Advisor approval required for satisfactory completion of theory placement examination in place of prerequisite.

MUS 151 Aural Skills I 2(1-2)
Spring.
Development of basic aural skills, including diatonic harmony, interval recognition, singing at sight, error detection, and rhythmic, melodic, and harmonic discriminatory listening.
Prerequisite: None.
Corequisite: None.
Registration Information: MUS 210 strongly recommend as corequisite.

MUS 152 Jazz Improvisation I 2(2-0)
Fall.
Introduction to theory and techniques of improvisation in various styles of jazz. Includes developing familiarity with various representative jazz artists.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of Instructor. Repeatable (6).

MUS 160 Applied Violin, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of Instructor. Repeatable (99).

MUS 161 Applied Viola, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of Instructor. Repeatable (99).

MUS 162 Applied Cello, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 163 Applied Bass, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 164 Applied Flute, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 165 Applied Oboe, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 166 Applied Bassoon, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 167 Applied Clarinet, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 168 Applied Saxophone, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 169 Applied Voice, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 170 Applied Trumpet, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 171 Applied French Horn, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 172 Applied Trombone, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 173 Applied Euphonium, Non-Major (1-2 V)
As Needed.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 174 Applied Tuba, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 175 Applied Percussion, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 176 Applied Piano, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 177 Applied Organ, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 178 Applied Classical Guitar, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 179 Applied Jazz/Comm. Guitar Non-Maj (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 180 Introduction to Composition 1(1-0)
Fall, Spring, Summer.
Introductory course to the processes of musical composition, emphasizing chamber works and consideration of form.
Prerequisite: MUS 150 and MUS 151.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 201 Music Performance Symposium II (1 V)
Fall, Spring.
Level two course in observation and critique of music performances; includes lectures, clinics, demonstrations, and performance preparation.
Prerequisite: MUS 101.
Corequisite: None.
Registration Information: Weekly critiques required for credit. Repeatable (2).

MUS 202 Concert Choir (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the choral ensemble.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performances are required. Permission of instructor. Repeatable (6).

MUS 203 Electronic Music 2(1-2)
As Needed.
In-depth study of and experiences with a variety of electronic music hardware and software. Includes sound recording and engineering practices.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

MUS 204 Collaborative Music Ensemble (0.5-1 V)
As Needed.
Ensemble specializing in small chamber works for piano, winds, strings, in various combinations.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MUS 207 University Band (0.5-1 V)
Spring.
Provides a Concert Band performing opportunity for students from all disciplines across campus.
Prerequisite: None.
Corequisite: None.
Registration Information: Director approval. Repeatable (6).

MUS 208 Vocal Jazz Ensemble (0.5-1 V)
Fall, Spring.
Secondary music ensemble specializing in the rehearsal, study, and public performance of appropriate vocal jazz ensemble literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities required. Permission of instructor. Repeatable (6).

MUS 209 Chamber Choir (0.5-1 V)
Fall, Spring.
Primary ensemble for vocal majors specializing in the rehearsal, study, and public performance of advanced choral literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities required. Permission of instructor. Repeatable (6).

MUS 210 Music Theory II 3(3-0)
Spring.
A continuation of MUS 150 with further development of diatonic harmony, four-part writing skills, diatonic modulation, and analysis of appropriate representative literature.
Prerequisite: MUS 150.
Corequisite: None.
Registration Information: MUS 151 strongly recommended as corequisite.

MUS 211 Aural Skills II 2(1-2)
Fall.
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: MUS 151.
Corequisite: None.
Registration Information: MUS 250 strongly recommended as corequisite.

MUS 212 Wind Ensemble (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the wind band.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performances are required. Permission of instructor. Repeatable (6).

MUS 214 Brass Ensemble (0.5-1 V)
Fall, Spring.
Level two music ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of brass instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities required. Permission of instructor. Repeatable (6).

MUS 215 Mariachi Ensemble (0.5-1 V)
Fall, Spring.
Level two music ensemble specializing in the rehearsal, study and performance of appropriate literature in the Mariachi style.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities required. Permission of instructor. Repeatable (6).

MUS 216 Thunderwolves Drumline (0.5-1 V)
Spring.
Provides an indoor drumline ensemble option for students from across campus who desire to expand their performance knowledge of percussion and other appropriate instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MUS 221 Chamber Ensemble (0.5-1 V)
Fall, Spring.
Secondary music ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of string instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities are required. Permission of instructor. Repeatable (6).

MUS 223 Percussion Techniques 1(0-2)
Fall, Spring.
Instruction in the fundamentals of percussion instruments from a pedagogical approach, enabling students to effectively teach beginners.
Prerequisite: None.
Corequisite: None.
Registration Information: Primarily intended for students in Music Education.

MUS 224 Percussion Ensemble (0.5-1 V)
Fall, Spring.
Music ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of percussion instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities are required. Permission of instructor. Repeatable (6).

MUS 227 Func. Piano II: Int/Proficiency 1(0-2)
Fall, Spring.
Continuation of MUS 127. Emphasis on providing further skills necessary for successful completion of the Proficiency Exam.
Prerequisite: MUS 127.
Corequisite: None.
Registration Information: Repeatable (99).

MUS 229 Piano Proficiency Completion 1(0-1)
Fall, Spring.
One-half hour private lesson per week in which to complete the preparation for and take the Piano Proficiency Exam.
Prerequisite: MUS 127 and MUS 227.
Corequisite: None.
Registration Information: Permission of instructor.

MUS 230 Marching Band (0.5-1 V)
Fall.
Provides functional music at home football games and select special occasions while serving as a laboratory of learning for future music educators.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MUS 231 Pep Band (0.5-1 V)
As Needed.
Provides functional music at various home athletic events and select special occasions while serving as a laboratory of learning for future music educators.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

MUS 232 Guitar Ensemble, Classical (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate classical guitar literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities are required. Permission of instructor. Repeatable (6).

MUS 233 Woodwind Techniques 1(0-2)
Fall, Spring.
Instruction in the fundamentals of woodwind instruments from a pedagogical approach, enabling students to effectively teach beginners.
Prerequisite: None.
Corequisite: None.
Registration Information: Primarily intended for students in Music Education.

MUS 234 Woodwind Ensemble (0.5-1 V)
Fall, Spring.
Music ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of woodwind instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities are required. Permission of instructor. Repeatable (6).

MUS 236 Guitar Ensemble, Jazz (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate non-classical guitar literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities are required. Permission of instructor. Repeatable (6).

MUS 240 Staging for Singers 1(0-1)
Fall, Spring.
An elective course providing instruction in blocking and acting for singers in scenes from musical theater or opera.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 242 Piano Ensemble (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate piano ensemble literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities are required. Permission of instructor. Repeatable (6).

MUS 243 String Techniques 1(0-2)
Fall, Spring.
Instruction in the fundamentals of stringed instruments from a pedagogical approach, enabling students to effectively teach beginners.
Prerequisite: None.
Corequisite: None.
Registration Information: Primarily intended for students in Music Education.

MUS 244 Orchestra (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the full orchestra.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and activities are required. Permission of instructor. Repeatable (6).

MUS 250 Music Theory III 3(3-0)
Fall.
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: MUS 210.
Corequisite: None.
Registration Information: MUS 211 strongly suggested as corequisite.

MUS 251 Aural Skills III (2 V)
Spring.
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: MUS 211.
Corequisite: None.
Registration Information: MUS 280 strongly suggested as corequisite.

MUS 252 Jazz Improvisation II 2(2-0)
Spring.
Continuation of instruction in theory and techniques of improvisation in various styles of jazz. Includes developing familiarity with various representative jazz artists.
Prerequisite: MUS 152.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MUS 253 Brass Techniques 1(0-2)
Fall, Spring.
Instruction in the fundamentals of brass instruments from a pedagogical approach, enabling students to effectively teach beginners.
Prerequisite: None.
Corequisite: None.
Registration Information: Primarily intended for students in Music Education.

MUS 254 Jazz Ensemble (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the jazz ensemble.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performances are required. Repeatable (6).

MUS 260 Applied Violin, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 261 Applied Viola, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 262 Applied Cello, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 263 Applied Bass, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 264 Applied Flute, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 265 Applied Oboe, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 266 Applied Bassoon, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 267 Applied Clarinet, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 268 Applied Saxophone, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor.
Repeatable (8).

MUS 269 Applied Voice, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor.
Repeatable (8).

MUS 270 Applied Trumpet, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor.
Repeatable (8).

MUS 271 Applied French Horn, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor.
Repeatable (8).

MUS 272 Applied Trombone, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor.
Repeatable (8).

MUS 273 Applied Euphonium, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor.
Repeatable (8).

MUS 274 Applied Tuba, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor.
Repeatable (8).

MUS 275 Applied Percussion, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor.
Repeatable (8).

MUS 276 Applied Piano, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor.
Repeatable (8).

MUS 277 Applied Organ, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor.
Repeatable (8).

MUS 278 Applied Classical Guitar, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor.
Repeatable (8).

MUS 279 Applied Jazz/Comm. Guitar Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor.
Repeatable (8).

MUS 280 Music Theory IV 3(3-0)
Spring.
A continuation of MUS 250. A harmonic study of the emergence of 20th century compositional techniques from chromatic functional harmonic schemes.
Prerequisite: MUS 250.
Corequisite: None.
Registration Information: MUS 251 strongly suggested as corequisite.

MUS 281 Aural Skills IV 2(1-2)
Fall.
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: MUS 251.
Corequisite: None.
Registration Information: None.

MUS 283 Music Theory Workshop 3(3-0)
As Needed.
Offered in summer semesters for students to improve their music theory proficiency.
Prerequisite: None.
Corequisite: None.
Registration Information: Credit may be applicable for degree requirements by examination. Repeatable (12).

MUS 284 Aural Skills Workshop 2(2-0)
As Needed.
Offered in summer semesters for students to improve their aural skills proficiency.
Prerequisite: None.
Corequisite: None.
Registration Information: Credit may be applicable for degree requirements by examination. Repeatable (8).

MUS 285 Cultural History of Popular Music 2(2-0)
Fall, Spring.
A survey of the various styles of American popular music from approximately 1900 to the present including folk music, ragtime, blues, jazz, and rock.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 291 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

MUS 301 Music Performance Symposium III (1 V)
Fall, Spring.
Level three course in observation and critique of music performances; includes lectures, clinics, demonstrations, and performance preparation.
Prerequisite: MUS 201.
Corequisite: None.
Registration Information: Weekly critiques required for credit. Repeatable (2).

MUS 303 Music and Computer Technology II 1(0-2)
Fall, Spring.
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.
Corequisite: None.
Registration Information: None.

MUS 305 Music History I 3(3-0)
Fall.
An in-depth study of music history and representative literature from Antiquity to the Classical period.
Prerequisite: MUS 118 and MUS 150 and MUS 210.
Corequisite: None.
Registration Information: None.

MUS 306 Technology for Music Educators 2(2-1)
Fall, Spring.
Applies educational technology to the classroom and performance activities of music teachers, including instruction, communication, sound recording and editing.
Prerequisite: MUS 103.
Corequisite: None.
Registration Information: None.

MUS 310 Audio Production II: Pro Tools 2(2-0)
Fall, Spring.
Advanced instruction in the use of Pro Tools for music mixing and mastering.
Prerequisite: MUS 110 and MUS 303.
Corequisite: None.
Registration Information: None.

MUS 313 Vocal Pedagogy 2(2-0)
Fall.
Introductory class designed to guide upper-class voice students in learning effective teaching skills as a private voice teacher. Topics covered will include the anatomy, physiology, acoustics, and care of the voice.
Prerequisites: None.
Corequisites: None.
Registration Information: Primarily for vocal music students.

MUS 323 English, Italian, & Latin Diction for Singers 2(2-0)
Spring.
A course in reading and pronunciation of English, Italian, and Latin for singers. Utilizes the International Phonetic Alphabet. Course intended for vocal music students.
Prerequisite: None.
Corequisite: None.
Registration Information: Primarily for vocal music students.

MUS 324 German Diction for Singers 2(2-0)
Fall.
A course in reading and pronunciation of German for singers. Utilizes the International Phonetic Alphabet.
Prerequisites: None.
Corequisites: None.
Registration Information: Primarily for vocal music students.

MUS 325 French & Spanish Diction for Singers 2(2-0)
Spring.
A course in reading and pronunciation of English, Italian, and Latin for singers. Utilizes the International Phonetic Alphabet.
Prerequisites: None.
Corequisites: None.
Registration Information: Primarily for vocal music students.

MUS 326 Guitar Physiology and Technique 2(0-2)
As Needed.
Focus on advanced knowledge of the fretboard, harmony, sightreading, and arranging for guitar.
Prerequisite: None.
Corequisite: None.
Registration Information: Successful completion of junior qualifying exam. Permission of instructor.

MUS 327 Guitar Ped II: Adv Sight Reading 2(0-2)
As Needed.
Focus on advanced sight reading skills for guitarists and the teaching of these skills.
Prerequisite: None.
Corequisite: None.
Registration Information: Successful completion of junior qualifying exam. Permission of instructor.

MUS 337 Introduction to World Music 3(3-0)
Fall, Spring, Summer.
A focus on various world music traditions and their integration into western and non-western contemporary styles. Includes significant musical compositions, composers/musicians, analysis, and multi-cultural issues.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 339 Applied Music Composition 1(0-0.5)
Fall, Spring.
Applied music study in composition. One half-hour lesson per week; time to be arranged with the instructor.
Prerequisite: MUS 280.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 340 General Music Methods 2(2-1)
Fall.
Comprehensive study in materials, techniques, methods, and problem-solving techniques for the teacher of general music in the public schools. Requires 20 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to the Teacher Education Program.

MUS 345 Junior Lecture Recital 1(1-0)
Fall, Spring.
Weekly one-hour meeting with instructor to complete lecture component of the Junior Lecture Recital.
Prerequisite: None.
Corequisite: MUS 360 and MUS 371.
Registration Information: 8 hours of Applied Music earned.

MUS 346 Piano Literature 2(2-0)
As Needed.
Survey of piano literature from the 18th-century to the present.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 347 Piano Pedagogy 2(2-0)
As Needed.
Introduction to the practices in teaching private and class piano.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 349 Junior Recital 2(0-1)
Fall, Spring.
Weekly 1 hour lesson with instructor in preparation and completion of the Junior Recital.
Prerequisite: None.
Corequisite: None.
Registration Information: Requires 6 earned hours of Applied Music. Repeatable (4).

MUS 350 Theory V 2(2-0)
As Needed.
Analysis and application of compositional techniques in music from all style periods, including form, harmony, and style. This course will focus most specifically on 16th and 18th century counterpoint and the Classical era.
Prerequisite: MUS 280.
Corequisite: None.
Registration Information: None.

MUS 354 Theory VI 2(2-0)
As Needed.
Analysis and application of compositional techniques in music from the 19th century (Romantic era) and 20th century (Modern era).
Prerequisites: MUS 280.
Corequisites: None.
Registration Information: None.

MUS 355 Music History II 3(3-0)
Spring.
An in-depth study of music history and representative literature from the Classical period to the present.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 356 World Music (3 V)
As Needed.
A study of world music traditions and their integration into western and non-western contemporary styles. Includes significant musical compositions, composers and historical eras; women composers and multi-cultural issues.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 357 Orchestration and Arranging 2(2-0)
Fall.
Instruction and application in techniques of scoring music for various combinations of musical mediums. Includes scoring for strings, woodwinds, brasses, percussion, and voices.
Prerequisite: MUS 150 and MUS 151 and MUS 210 and MUS 211 and MUS 250 and MUS 251 and MUS 280 and MUS 281.
Corequisite: None.
Registration Information: None.

MUS 358 Basic Conducting 2(2-0)
Fall.
Instruction in the conducting of music, with an emphasis on building basic skills and techniques.
Prerequisite: MUS 150 and MUS 151 and MUS 210 and MUS 211 and MUS 250 and MUS 251 and MUS 280 and MUS 281 and MUS 357.
Corequisite: None.
Registration Information: None.

MUS 359 Advanced Conducting 2(0-1)
Spring.
Continuing instruction in the conducting of music in the student's choice of emphasis areas.
Prerequisite: MUS 358.
Corequisite: None.
Registration Information: Permission of Instructor.

MUS 360 Applied Violin, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 361 Applied Viola, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 362 Applied Cello, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 363 Applied Bass, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 364 Applied Flute, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 365 Applied Oboe, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 366 Applied Bassoon, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 367 Applied Clarinet, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 368 Applied Saxophone, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 369 Applied Voice, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 370 Applied Trumpet, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 371 Applied French Horn, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 372 Applied Trombone, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 373 Applied Euphonium, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 374 Applied Tuba, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 375 Applied Percussion, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 376 Applied Piano, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 377 Applied Organ, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 378 Applied Classical Guitar, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 379 Applied Jazz/Comm. Guitar Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 380 Applied Violin, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 381 Applied Viola, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 382 Applied Cello, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 383 Applied Bass, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 384 Applied Flute, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 385 Applied Oboe, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 386 Applied Bassoon, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 387 Applied Clarinet, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 388 Applied Saxophone, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 389 Applied Voice, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 390 Applied Trumpet, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 391 Applied French Horn, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 392 Applied Trombone, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 393 Applied Euphonium, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 394 Applied Tuba, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 395 Applied Percussion, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 396 Applied Piano, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 397 Applied Organ, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 398 Applied Classical Guitar, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 399 Applied Jazz/Comm. Guitar Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 401 Music Performance Symposium IV (1 V)
Fall, Spring.
Level four course in observation and critique of music performances; includes lectures, clinics, demonstrations, and performance preparation.
Prerequisite: MUS 301.
Corequisite: None.
Registration Information: Weekly critiques required for credit. Repeatable (2).

MUS 402 Concert Choir (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the choral ensemble.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performances are required. Repeatable (6).

MUS 404 Collaborative Music Ensemble (0.5-1 V)
As Needed.
Ensemble specializing in small chamber works for piano, winds, strings, in various combinations.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MUS 407 University Band (0.5-1 V)
Spring.
Provides a Concert Band performing opportunity for students from all disciplines across campus.
Prerequisite: None.
Corequisite: None.
Registration Information: Director approval. Repeatable (6).

MUS 408 Vocal Jazz Ensemble (0.5-1 V)
Fall, Spring.
Secondary music ensemble specializing in the rehearsal, study, and public performance of appropriate vocal jazz ensemble literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performances are required. Repeatable (6).

MUS 409 Chamber Choir (0.5-1 V)
Fall, Spring.
Primary music ensemble for vocal majors specializing in the rehearsal, study, and public performance of advanced choral literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities required. Repeatable (6).

MUS 410 Audio Production Lab 1(0-1)
Fall, Spring.
Offers advanced students the opportunity to participate in and direct live performance recording of CSU Pueblo ensembles.
Prerequisite: MUS 110 and MUS 303.
Corequisite: None.
Registration Information: MUS 310 strongly suggested as prerequisite.

MUS 412 Wind Ensemble (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the wind band.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performances are required. Repeatable (6).

MUS 414 Brass Ensemble (0.5-1 V)
Fall, Spring.
Music ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of brass instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities required. Repeatable (6).

MUS 415 Mariachi Ensemble (0.5-1 V)
Fall, Spring.
Music ensemble specializing in the rehearsal, study, and performance of appropriate literature in the Mariachi style.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities required. Repeatable (6).

MUS 416 Thunderwolves Drumline (0.5-1 V)
Spring.
Provides an indoor drumline ensemble option for students from across campus who desire to expand their performance knowledge of percussion and other appropriate instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Director approval. Repeatable (6).

MUS 420 Film Scoring 2(2-0)
Fall, Spring.
The principles and history of film music, writing music for film and other music media integrating Sibelius and Pro Tools software.
Prerequisite: None.
Corequisite: None.
Registration Information: MUS 180 strongly recommend as prerequisite. Permission of instructor.

MUS 421 Chamber Ensemble (0.5-1 V)
Fall, Spring.
Level four secondary ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of string instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities required. Repeatable (6).

MUS 424 Percussion Ensemble (0.5-1 V)
Fall, Spring.
Ensemble specializing in the rehearsal, and performance of appropriate literature for combinations of percussion instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities are required. Repeatable (6).

MUS 426 Advanced Piano Pedagogy 2(2-0)
As Needed.
Advanced study of practices and methods of piano instruction both in individual studio lessons and class piano courses.
Prerequisite: MUS 346.
Corequisite: None.
Registration Information: None.

MUS 427 Piano Pedagogy Practicum 2(2-0)
As Needed.
Practicum rotates experiences in Studio Management and Teaching Seminar, Class Piano Practicum, Musical Event Management.
Prerequisite: MUS 446.
Corequisite: None.
Registration Information: Repeatable (6).

MUS 430 Marching Band (0.5-1 V)
Fall.
Provides functional music at home football games and select special occasions while serving as a laboratory of learning for future music educators.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MUS 431 Pep Band (0.5-1 V)
As Needed.
Provides functional music at various home athletic events and select special occasions while serving as a laboratory of learning for future music educators.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

MUS 432 Guitar Ensemble, Classical (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate classical guitar literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities are required. Repeatable (6).

MUS 434 Woodwind Ensemble (0.5-1 V)
Fall, Spring.
Music ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of woodwind instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities are required. Repeatable (6).

MUS 436 Guitar Ensemble, Jazz (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate non-classical guitar literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities are required. Repeatable (6).

MUS 438 Composition Recital 2(0-1)
Fall, Spring.
In-depth applied study to composition leading to the performance of original works.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MUS 439 Recital: Jazz Studies 2(0-1)
Fall, Spring.
In-depth applied study in jazz studies leading to the performance of a solo or joint recital.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MUS 440 Choral Music Methods 2(2-1)
Spring.
Comprehensive study in materials, techniques, methods, and problem-solving techniques for the teacher of choral music in the public schools. Requires 20 hours of field experience.
Prerequisite: MUS 113 and MUS 223 and MUS 233 and MUS 243 and MUS 253.
Corequisite: None.
Registration Information: Admission to the Teacher Education Program.

MUS 441 Instrumental Music Methods 2(2-1)
Spring.
Comprehensive study in materials, techniques, methods, and problem-solving techniques for the teacher of instrumental music in the public schools. Requires 20 hours of field experience.
Prerequisite: MUS 113 and MUS 223 and MUS 233 and MUS 243 and MUS 253.
Corequisite: None.
Registration Information: Admission to the Teacher Education Program.

MUS 442 Piano Ensemble (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate piano ensemble literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities are required. Repeatable (6).

MUS 444 Orchestra (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the full orchestra.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and activities are required. Repeatable (6).

MUS 445 Applied Violin, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 446 Applied Viola, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 447 Applied Cello, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 448 Applied Bass, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 449 Applied Flute, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 454 Jazz Ensemble (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the jazz ensemble.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performances are required. Repeatable (6).

MUS 455 Applied Oboe, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 456 Applied Bassoon, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 457 Applied Clarinet, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 458 Applied Saxophone, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 459 Applied Voice, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 460 Applied Trumpet, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 461 Applied French Horn, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 462 Applied Trombone, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 463 Applied Euphonium, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 464 Applied Tuba, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 465 Applied Percussion, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 466 Applied Piano, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 467 Applied Organ, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 468 Applied Classical Guitar, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 469 Applied Jazz/Comm. Guitar Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 470 Senior Recital, Violin 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 471 Senior Recital, Viola 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 472 Senior Recital, Cello 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 473 Senior Recital, Bass 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 474 Senior Recital, Flute 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 475 Senior Recital, Oboe 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 476 Senior Recital, Bassoon 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 477 Senior Recital, Clarinet 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 478 Senior Recital, Saxophone 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 479 Senior Recital, Voice 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 480 Senior Recital, Trumpet 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 481 Senior Recital, French Horn 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 482 Senior Recital, Trombone 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 483 Senior Recital, Euphonium 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 484 Senior Recital, Tuba 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 485 Senior Recital, Percussion 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 486 Senior Recital, Piano 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 487 Senior Recital, Organ 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 488 Senior Recital, Classical Guitar 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 489 Senior Recital, Jazz Guitar 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 491 Special Topics (1-4 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 495 Independent Study (1-4 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 498 Internship 1(0-1)
Fall, Spring.
Provides an infield, firsthand experience in traditional church music programs.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (3).

MUS 501 Special Methods in Music Education 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

MUS 502 Concert Choir (0.5-1 V)
Fall, Spring.
Primary ensemble for vocal majors, specializing in the rehearsal, study, and public performance of advanced choral literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities required. Permission of instructor. Repeatable (4).

MUS 504 Collaborative Music Ensemble (0.5-1 V)
As Needed.
Ensemble specializing in small chamber works for piano, winds, strings, in various combinations.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (2).

MUS 509 Chamber Choir (0.5-1 V)
Fall, Spring.
Primary ensemble for vocal majors, specializing in the rehearsal, study, and public performance of advanced choral literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities required. Permission of instructor. Repeatable (4).

MUS 512 Wind Ensemble (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of appropriate literature for the wind band.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performances are required. Permission of instructor. Repeatable (4).

MUS 513 Advanced Vocal Pedagogy 1(0-1)
As Needed.
Designed for the experienced vocal music teacher who seeks graduate-level pedagogical techniques to better guide and develop the adolescent voice.
Prerequisite: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 520 Graduate Music Ensemble (0.5-1 V)
As Needed.
Secondary ensembles specializing in the rehearsal, study, and public performance of specific genres, i.e., jazz, chamber music.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (4).

MUS 523 Advanced Percussion Pedagogy 1(0-1)
As Needed.
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: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 529 Piano Proficiency Completion 1(0-0.5)
Fall, Spring.
One-half hour private lesson per week to prepare for and complete the departmental Piano Proficiency Exam.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MUS 530 Marching Band (0.5-1 V)
Fall.
Provides functional music at home football games and select special occasions while serving as a laboratory of learning for future music educators.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (2).

MUS 531 Pep Band (0.5-1 V)
As Needed.
Provides functional music at various home athletic events and select special occasions while serving as a laboratory of learning for future music educators.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (2).

MUS 533 Advanced String Pedagogy 1(0-1)
As Needed.
This course expands upon the basics of string pedagogy and literature. Includes discussion of problems and possible solutions in student playing techniques.
Prerequisite: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 540 Kodaly Method for Elementary Music 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 543 Advanced Woodwind Pedagogy 1(0-1)
As Needed.
Designed for the experienced instrumental music teacher who seeks advanced techniques in the teaching and playing of woodwind instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 544 Orchestra (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the full orchestra.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and activities are required. Permission of instructor. Repeatable (4).

MUS 545 Current Issues in Music Education 3(3-0)
As Needed.
History and philosophy of music education in public schools, with readings, discussions, and practical applications of content standards in instruction and assessment.
Prerequisite: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 550 Instrumental Conducting 2(2-0)
As Needed.
Graduate level instruction in instrumental conducting in a pedagogical setting with emphasis on selection of appropriate literature as well as technique.
Prerequisite: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 553 Advanced Brass Pedagogy 1(0-1)
As Needed.
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: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 559 Advanced Music Analysis 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 560 Choral Conducting 2(2-0)
As Needed.
Graduate level instruction in choral conducting in a pedagogical setting with emphasis on selection of appropriate literature as well as technique.
Prerequisite: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 565 Methods of Research in Music Ed 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department chair.

MUS 570 Advanced Applied Music, Strings 2(0-1)
As Needed.
In-depth applied study in guitar or orchestral string performance areas for the highly advanced student.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (4).

MUS 571 Advanced Applied Music, Woodwinds 2(0-1)
As Needed.
In-depth applied study in woodwind performance areas for the highly advanced student.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (4).

MUS 572 Advanced Applied Music, Percussion 2(0-1)
As Needed.
In-depth applied study in percussion performance for the highly advanced student.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (4).

MUS 573 Advanced Applied Music, Brass 2(0-1)
As Needed.
In-depth applied study in brass performance areas for the highly advanced student.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (4).

MUS 574 Advanced Applied Music, Voice 2(0-1)
As Needed.
In-depth applied study in vocal performance for the highly advanced student.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (4).

MUS 579 Graduate Recital 2(0-1)
Fall, Spring.
In-depth advanced applied study leading to the performance of a solo or joint recital.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MUS 580 Advanced General Music Methods 2(2-1)
As Needed.
Advanced, comprehensive study in materials, techniques, methods, and problem-solving techniques for the teacher of general music in the public schools. Requires 20 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to Teacher Education Program.

MUS 581 Advanced Choral Methods 2(2-1)
As Needed.
Advanced, comprehensive study in materials, techniques, methods, and problem-solving techniques for the teacher of choral music in the public schools. Requires 20 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to Teacher Education Program.

MUS 582 Advanced Instrumental Methods 2(2-1)
As Needed.
Advanced, comprehensive study in materials, techniques, methods, and problem-solving techniques for the teacher of choral music in the public schools. Requires 20 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to Teacher Education Program.

MUS 591 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

MUS 593 Seminar (1-3 V)
As Needed.
Practical application of current music techniques to secondary teaching.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

MUS 594 Field Experience 6(0-6)
Fall, Spring, Summer.
Field experience in an educational setting.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MUS 595 Independent Study (1-4 V)
Fall, Spring, Summer.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

Composition/Music Theory, Minor

Specific Program Requirements

Course	Title	Credits
Required Core Courses		
MUS 180	Introduction to Composition (four semesters, 1 hour each: 1-1-1-1)	4
MUS 438	Composition Recital	2
MUS 350	Theory V	2
Select one of the following:		2
MUS 351		2
MUS 352		2
MUS 353		2
Electives		
Select 8 credits from the following:		8
MUS 113	Vocal Techniques and Diction	1
MUS 180	Introduction to Composition (additional semesters beyond core)	1
MUS 223	Percussion Techniques	1
MUS 233	Woodwind Techniques	1
MUS 243	String Techniques	1
MUS 253	Brass Techniques	1
MUS 359	Advanced Conducting	2
Advanced Music Theory courses (not taken for core)		2-6
Total Credits		**18**

Music majors completing minors in Music Technology, Composition/Theory, Jazz Studies, or Organ Performance must complete a minimum of 18 hours beyond required courses of the BA-Music (General Emphasis) degree, to include required hours in the minor and any electives beyond major and minor degree requirements.

Jazz Studies, Minor

Specific Program Requirements

Course	Title	Credits
Required Core Courses		
MUS 120	History of Jazz	2
MUS 285	Cultural History of Popular Music	2
MUS 152	Jazz Improvisation I	2
MUS 252	Jazz Improvisation II	2
MUS 180	Introduction to Composition (Jazz Composition/Arranging - credits 1-1)	2
MUS 439	Recital: Jazz Studies	2
Ensemble Participation		
Select 6 credits from the following:		6
MUS 208/408	Vocal Jazz Ensemble	0.5,1
MUS 236/436	Guitar Ensemble, Jazz	0.5,1
MUS 254/454	Jazz Ensemble	0.5,1
Total Credits		**18**

Music majors completing minors in Music Technology, Composition/Theory, Jazz Studies, or Organ Performance must complete a minimum of 18 hours beyond required courses of the BA-Music (General Emphasis) degree, to include required hours in the minor and any electives beyond major and minor degree requirements. These hours fulfill the College of Humanities, Arts and Social Sciences (CHASS) graduation requirements that 18 hours must be taken in a minor or in courses outside the major discipline.

Music, Bachelor of Arts

Expected Student Outcomes

Upon completion of the Bachelor of Arts degree in Music, students will:

- Read, analyze, and perform music with fluency in at least one performance medium and in a variety of performance styles;
- Use the piano proficiently as an instrument for independent study of music theory, analysis of scores, and preparation of compositions or arrangements, as appropriate to the common tasks of a professional musician;
- Demonstrate proficiency in aural recognition and analysis of music, and in singing musical lines at sight, as appropriate to the common tasks of a professional musician;
- Recognize and describe representative selections of music from all the significant style periods and genres of western art music; and
- Create arrangements and original compositions utilizing the recognized ranges and idioms of orchestral and band instruments and of vocal ensembles.

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 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 concentration areas of Performance or Music Education are required to present recitals appropriate to their degree program and (for Music Education) to pass the national standardized PRAXIS examination.

Specific Program Requirements

General Education: 35

NOTE: must also complete the World Language Requirement. Because of the unique use of world languages in musical contexts (vocal repertoire in particular), students earning the Bachelor of Arts degree in Music may, in consultation with their advisor, complete the BA degree World Language Requirement with two 101-level World Language courses, chosen from Italian, German, French and Spanish.

NOTE: must include MUS 118 Music Appreciation (GT-AH1) (3 c.h.).
In addition, all students must participate in appropriate Primary and Secondary ensembles as assigned each semester, except when Student Teaching.

Specific Core Requirements

Course	Title	Credits
MUS Courses		
MUS 150	Music Theory I	3
MUS 151	Aural Skills I	2
MUS 210	Music Theory II	3
MUS 211	Aural Skills II	2
MUS 250	Music Theory III	3
MUS 251	Aural Skills III	2
MUS 280	Music Theory IV	3
MUS 281	Aural Skills IV	2
MUS 305	Music History I	3
MUS 355	Music History II	3
MUS x01	Music Performance Symposium (6 semesters)	0
MUS xxx	Primary Ensemble (6 semesters, 2 upper division) [1]	6
MUS xxx	Secondary Ensemble (2 semesters, 1 upper division) (**Note**: Music Ed concentration exempt from this credit requirement) [2]	2
MUS xxx	Major Applied Lesson (6 semesters, 2 upper division) (Music Ed concentration completes 5 Semesters and Junior Lecture Recital)	12
MUS 127	Functional Piano I: Beginning (May be repeated; may be waived for Music Education majors)	1
MUS 229	Piano Proficiency Completion	1
MUS 103	Music and Computer Technology I	1
MUS 303	Music and Computer Technology II [3]	1
or MUS 306	Technology for Music Educators	
MUS 357	Orchestration and Arranging	2
MUS 358	Basic Conducting	2
Free Electives		22
Electives		
Total Credits		**76**

1. **Primary Ensembles:** (All courses MUS) - See chart below.
2. **Secondary Ensembles:** (All courses MUS) - See chart below.
3. **Note:** Music Education majors must take MUS 306 Technology for Music Educators (2 c.h.).

Note: MUS 306 Technology for Music Educators (2 c.h.) may be waived with completion of an appropriate 500-level Education Technology course toward the Master of Education degree and 2 additional hours of music electives.

Note: Piano students complete either of the following in lieu of Functional Piano courses:

MUS 346 Piano Literature (2 c.h.) OR MUS 347 Piano Pedagogy (2 c.h.)

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.

Performance Skills

The attainment of an appropriate level of performance skills is required in order to function successfully as a musician. The minimum *Performance Standards*, which appear on the music department's web site and in the music department student handbook, provide representative examples of

music literature and repertoire and must be successfully completed for each of the musical areas of performance concentration.

Admission to Upper Division

All music majors must qualify for admission to Upper Division (junior-level) study leading to the specific degree by successfully completing the Junior Qualifying Exam at the end of their sophomore year. In addition, all music majors will be required to pass MUS 229 Piano Proficiency Completion (1 c.h.) before performing an upper level recital, student teaching, or graduating. See the *Department of Music Student Handbook* for specific information regarding these evaluations.

Standards

Knowledge of specific subject areas, as recommended by the National Association of Schools of Music in music education, music theory, music history, music technology, and music performance will be measured through outcomes-testing.

Ensemble Registration and Requirements

The real-life performance experience provided by CSU Pueblo ensembles is paramount to the professional training of our Music majors. University ensembles are also the 'public face' of the Department of Music and student participation is essential to our collective success.

At minimum, Music majors and scholarship recipients are required to participate in two ensembles every semester in residence. Applied Music registration and registration in upper division Music courses will not be permitted without the requisite ensemble registration.

Ensemble Registration Specific to the Major

General BA Music majors are to select an ensemble experience tailored toward their long-term professional goals, with a minimum of 6 hours of primary ensemble and 2 semesters of secondary ensemble credit required. A minimum of 2 semesters of Primary ensemble and 1 semester of Secondary ensemble must be earned at the upper division level (during the Junior or Senior year).

Music Education majors are to pursue a breadth of ensemble experiences, including Marching Band as this is an area all Music Education graduates are certified to teach. Music Education majors complete a minimum of 6 semesters of Primary Ensemble, with at least 2 semesters earned at the upper division level. Wind and Percussion Music Education majors are required to participate in Marching Band for two semesters, during the fall semester of their freshman and sophomore years (or first two years enrolled in the major). Music Education majors in other instrumental areas or voice are required to participate in Marching Band for one semester on a secondary instrument following an audition or successful completion of a related techniques class. All Music Education majors are required to participate in at least one instrumental ensemble and one vocal ensemble during their CSU Pueblo tenure.

Performance majors are to pursue an ensemble experience focused on their specific instrument, with a minimum of 8 Primary and 2 Secondary ensembles required (with a minimum of 4 Primary ensembles and 1 Secondary ensemble earned at the upper division level).

Ensemble Registration Specific to a Student's Principal Instrument and Scholarship Status

Wind and Percussion instrumental principals are required to participate in Marching Band for two semesters, during the fall semester of their freshman and sophomore years (or first two years enrolled in the major) as well as Wind Ensemble every semester they are registered for applied music. Voice principals are required to participate in Concert and Chamber choirs every semester in residence. String principals are required to participate in Orchestra and Chamber Music every semester they are registered for applied music. Percussion principals are required to participate in Percussion Ensemble every semester they are registered for applied music. Guitar principals are required to participate in at least one Guitar Ensemble every semester they are registered for applied music.

Applied instructors have a vested interest in the ensemble selection of their students and additional instrumental areas may have additional ensemble requirements. Students should consult their applied instructors for specific ensemble requirements of their applied studio. Participation in excess of three ensembles in any given semester is at the discretion of the applied instructor.

Music scholarship recipients, regardless of major, are required to participate in a minimum of two ensembles each semester. Wind and Percussion Scholarship recipients are required to participate in Marching Band during the fall semester of their freshman and sophomore years (or first two years of receiving a Music scholarship).

Exceptions to ensemble policies must be approved by the Chair of Music in consultation with ensemble directors. Ensemble assignments for all students are at the direction and discretion of the Music faculty and may require an audition.

Primary Ensembles: (All courses MUS)

Course	Title	Credits
Fr/Soph		
MUS 209	Chamber Choir	0.5
MUS 212	Wind Ensemble	0.5
MUS 232	Guitar Ensemble, Classical	0.5
MUS 236	Guitar Ensemble, Jazz	0.5
MUS 242	Piano Ensemble	0.5
MUS 244	Orchestra	0.5
Jr/Sr		
MUS 409	Chamber Choir	0.5
MUS 412	Wind Ensemble	0.5
MUS 432	Guitar Ensemble, Classical	0.5
MUS 436	Guitar Ensemble, Jazz	0.5
MUS 442	Piano Ensemble	0.5
MUS 444	Orchestra	0.5

Secondary Ensembles: (All courses MUS)

Course	Title	Credits
Fr/Soph		
MUS 202	Concert Choir	0.5
MUS 204	Collaborative Music Ensemble	0.5
MUS 208	Vocal Jazz Ensemble	0.5
MUS 214	Brass Ensemble	0.5
MUS 221	Chamber Ensemble	0.5
MUS 224	Percussion Ensemble	0.5
MUS 231	Pep Band	0.5
MUS 234	Woodwind Ensemble	0.5
MUS 230	Marching Band	0.5
MUS 254	Jazz Ensemble	0.5
Jr/Sr		
MUS 402	Concert Choir	0.5

MUS 404	Collaborative Music Ensemble	0.5
MUS 408	Vocal Jazz Ensemble	0.5
MUS 414	Brass Ensemble	0.5
MUS 421	Chamber Ensemble	0.5
MUS 424	Percussion Ensemble	0.5
MUS 431	Pep Band	0.5
MUS 434	Woodwind Ensemble	0.5
MUS 430	Marching Band	0.5
MUS 454	Jazz Ensemble	0.5

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

Art, Research and Creativity (ARC)

Course	Title	Credits
ARC 110	Integrated Studies	3
ARC 174	Fundamentals of Digital Media	3
ARC 310	Critical Fundamental Skills Review	1
ARC 410	Senior Capstone Presentation	1
Total Credits		**8**

Music, Minor

Specific Program Requirements

Course	Title	Credits
Required Core Courses		
MUS 118	Music Appreciation (GT-AH1)	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	2
MUS 210	Music Theory II	3
MUS 211	Aural Skills II	2
MUS xxx	Applied, non major (4 semesters)	4
Total Credits		**22**

Music majors completing minors in Music Technology, Composition/ Theory, Jazz Studies, or Organ Performance must complete a minimum of 18 hours beyond required courses of the BA-Music (General Emphasis) degree, to include required hours in the minor and any electives beyond major and minor degree requirements.

Music: K-12 Teacher Preparation Concentration, Bachelor of Arts

Expected Student Outcomes

Upon completion of the Bachelor of Arts degree in Music, students will:

- Read, analyze, and perform music with fluency in at least one performance medium and in a variety of performance styles;
- Use the piano proficiently as an instrument for independent study of music theory, analysis of scores, and preparation of compositions or arrangements, as appropriate to the common tasks of a professional musician;
- Demonstrate proficiency in aural recognition and analysis of music, and in singing musical lines at sight, as appropriate to the common tasks of a professional musician;
- Recognize and describe representative selections of music from all the significant style periods and genres of western art music; and
- Create arrangements and original compositions utilizing the recognized ranges and idioms of orchestral and band instruments and of vocal ensembles.

In addition, students in the *Performance concentration* program will:

- Conduct large and small ensembles in their primary performance medium;
- Prepare and present in public a wide selection of repertoire representative of the highest standard of performance technique and style appropriate to young professional artists; and
- In conjunction with recital performances, prepare scholarly program notes on the repertoire being presented and work closely with administrative staff to complete the copy and format of professional publicity documents.

In addition, students in the *Music Education concentration* program will:

- Conduct large and small ensembles in their primary performance medium;
- Demonstrate through field experiences and student teaching the necessary skills and dispositions for teaching music in a variety of public school settings;
- Articulate in written documents addressed to the general audience (such as parents, school board members, or community at large) a well-grounded philosophy of music education; and
- Create instructional plans, long-range curriculum outlines, and assessments for music education at elementary and secondary levels, following Colorado Academic Standards and incorporating recognized best practices in music pedagogy.

Outcomes Assessment Activities

Department faculty hear all music majors perform prepared solos at least three times per semester, with both formative and summative assessments recorded at significant points, such as final juries and the Junior Qualifying Exam at the end of the sophomore year. In addition, every primary and secondary ensemble performs at least one concert per semester. From the accumulated success of these performances, the faculty can determine and assess:

- Attainment of performing skills as students progress through the curriculum;
- Effectiveness of recruiting and retention in each instrumental area and vocal range; and
- Degree of knowledgeable application of the concepts of music theory and history to the sensitive performance of a wide range of repertoire.

Every music major must pass an 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 concentration areas of Performance or Music Education are required to present recitals appropriate to their degree program and (for Music Education) to pass the national standardized PRAXIS examination.

Specific Program Requirements

Music Core (Music Ed): 50-51
(Must include MUS 306 Technology for Music Educators (2 c.h.) taken in core)

General Education: 35

- Humanities requirements must include MUS 118 Music Appreciation (GT-AH1) (3 c.h.) and CID 103 Speaking & Listening (3 c.h.).
- Social Science requirements must include either PSYC 151 Human Development (GT-SS3) (3 c.h.) or PSYC 251 Childhood and Adolescence (3 c.h.).

NOTE: The World Language requirement must also be satisfied. It is recommended to take WL 100 Intro to Comparative Linguistics (3 c.h.) as a Humanities and then take ANTH 106 Language, Thought and Culture (3 c.h.)/ENG 106 Language, Thought and Culture (3 c.h.) as a Social Science to satisfy this requirement.

Course	Title	Credits
Music Core Requirements		
Music Core		50-51
General Education Requirements		
General Education		35
Music Education Concentration Requirements		
MUS x01	Music Performance Symposium (1 semester)	0
MUS 345	Junior Lecture Recital [1]	1
MUS 359	Advanced Conducting [1]	2
MUS 113	Vocal Techniques and Diction [1]	1
MUS 223	Percussion Techniques [1]	1
MUS 233	Woodwind Techniques [1]	1
MUS 243	String Techniques [1]	1
MUS 253	Brass Techniques [1]	1
MUS 340	General Music Methods [1]	2
MUS 440	Choral Music Methods [1]	2
MUS 441	Instrumental Music Methods [1]	2
Education Requirements		
ED 202	Foundations of Education [2]	3
ED 301	Frameworks of Teaching [2]	4
RDG 435	Disciplinary Literacy [1]	4
ED 412	Teaching Diverse Learners [1]	3
ED 485	Capstone Seminar in Education	1
ED 489	Student Teaching K-12	12
Total Credits		**126-127**

General Education: 35

NOTE: must also complete the World Language Requirement. Because of the unique use of world languages in musical contexts (vocal repertoire in particular), students earning the Bachelor of Arts degree in Music may, in consultation with their advisor, complete the BA degree World Language Requirement with two 101-level World Language courses, chosen from Italian, German, French and Spanish.

NOTE: must include MUS 118 Music Appreciation (GT-AH1) (3 c.h.).
In addition, all students must participate in appropriate Primary and Secondary ensembles as assigned each semester, except when Student Teaching.

Specific Core Requirements

Course	Title	Credits
MUS Courses		
MUS 150	Music Theory I	3
MUS 151	Aural Skills I	2
MUS 210	Music Theory II	3
MUS 211	Aural Skills II	2
MUS 250	Music Theory III	3
MUS 251	Aural Skills III	2
MUS 280	Music Theory IV	3
MUS 281	Aural Skills IV	2
MUS 305	Music History I	3
MUS 355	Music History II	3
MUS x01	Music Performance Symposium (6 semesters)	0
MUS xxx	Primary Ensemble (6 semesters, 2 upper division) [1]	6
MUS xxx	Secondary Ensemble (2 semesters, 1 upper division) (**Note**: Music Ed concentration exempt from this credit requirement) [2]	2
MUS xxx	Major Applied Lesson (6 semesters, 2 upper division) (Music Ed concentration completes 5 Semesters and Junior Lecture Recital)	12
MUS 127	Functional Piano I: Beginning (May be repeated; may be waived for Music Education majors)	1
MUS 229	Piano Proficiency Completion	1
MUS 103	Music and Computer Technology I	1
MUS 303	Music and Computer Technology II [3]	1
or MUS 306	Technology for Music Educators	
MUS 357	Orchestration and Arranging	2
MUS 358	Basic Conducting	2
Electives		
Free Electives		30-31
Total Credits		**84-85**

1 **Primary Ensembles:** (All courses MUS) - See chart below.
2 **Secondary Ensembles:** (All courses MUS) - See chart below.
3 **Note:** Music Education majors must Take MUS 306 Technology for Music Educators (2 c.h.).

Note: MUS 306 Technology for Music Educators (2 c.h.) may be waived with completion of an appropriate 500-level Education Technology course toward the Master of Education degree and 2 additional hours of music electives.

Note: Piano students complete either of the following in lieu of Functional Piano courses:

MUS 346 Piano Literature (2 c.h.) OR MUS 347 Piano Pedagogy (2 c.h.)

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.

Performance Skills

The attainment of an appropriate level of performance skills is required in order to function successfully as a musician. The minimum *Performance Standards*, which appear on the music department's web site and in the music department student handbook, provide representative examples of music literature and repertoire and must be successfully completed for each of the musical areas of performance concentration.

Admission to Upper Division

All music majors must qualify for admission to Upper Division (junior-level) study leading to the specific degree by successfully completing the Junior Qualifying Exam at the end of their sophomore year. In addition, all music majors will be required to pass MUS 229 Piano Proficiency Completion (1 c.h.) before performing an upper level recital, student teaching, or graduating. See the *Department of Music Student Handbook* for specific information regarding these evaluations.

Standards

Knowledge of specific subject areas, as recommended by the National Association of Schools of Music in music education, music theory, music history, music technology, and music performance will be measured through outcomes-testing.

Ensemble Registration and Requirements

The real-life performance experience provided by CSU Pueblo ensembles is paramount to the professional training of our Music majors. University ensembles are also the 'public face' of the Department of Music and student participation is essential to our collective success.

At minimum, Music majors and scholarship recipients are required to participate in two ensembles every semester in residence. Applied Music registration and registration in upper division Music courses will not be permitted without the requisite ensemble registration.

Ensemble Registration Specific to the Major

General BA Music majors are to select an ensemble experience tailored toward their long-term professional goals, with a minimum of 6 hours of primary ensemble and 2 semesters of secondary ensemble credit required. A minimum of 2 semesters of Primary ensemble and 1 semester of Secondary ensemble must be earned at the upper division level (during the Junior or Senior year).

Music K-12 Education majors are to pursue a breadth of ensemble experiences, including Marching Band as this is an area all Music K-12 Education graduates are certified to teach. Music K-12 Education majors complete a minimum of 6 semesters of Primary Ensemble, with at least 2 semesters earned at the upper division level. Wind and Percussion Music K-12 Education majors are required to participate in Marching Band for two semesters, during the fall semester of their freshman and sophomore years (or first two years enrolled in the major). Music K-12 Education majors in other instrumental areas or voice are required to participate in Marching Band for one semester on a secondary instrument following an audition or successful completion of a related techniques class. All Music K-12 Education majors are required to participate in at least one instrumental ensemble and one vocal ensemble during their CSU Pueblo tenure.

Performance majors are to pursue an ensemble experience focused on their specific instrument, with a minimum of 8 Primary and 2 Secondary ensembles required (with a minimum of 4 Primary ensembles and 1 Secondary ensemble earned at the upper division level).

Ensemble Registration Specific to a Student's Principal Instrument and Scholarship Status

Wind and Percussion instrumental principals are required to participate in Marching Band for two semesters, during the fall semester of their freshman and sophomore years (or first two years enrolled in the major) as well as Wind Ensemble every semester they are registered for applied music. Voice principals are required to participate in Concert and Chamber choirs every semester in residence. String principals are required to participate in Orchestra and Chamber Music every semester they are registered for applied music. Percussion principals are required to participate in Percussion Ensemble every semester they are registered for applied music. Guitar principals are required to participate in at least one Guitar Ensemble every semester they are registered for applied music.

Applied instructors have a vested interest in the ensemble selection of their students and additional instrumental areas may have additional ensemble requirements. Students should consult their applied instructors for specific ensemble requirements of their applied studio. Participation in excess of three ensembles in any given semester is at the discretion of the applied instructor.

Music scholarship recipients, regardless of major, are required to participate in a minimum of two ensembles each semester. Wind and Percussion Scholarship recipients are required to participate in Marching Band during the fall semester of their freshman and sophomore years (or first two years of receiving a Music scholarship).

Exceptions to ensemble policies must be approved by the Chair of Music in consultation with ensemble directors. Ensemble assignments for all students are at the direction and discretion of the Music faculty and may require an audition.

Primary Ensembles: (All courses MUS)

Course	Title	Credits
Fr/Soph		
MUS 209	Chamber Choir	0.5
MUS 212	Wind Ensemble	0.5
MUS 232	Guitar Ensemble, Classical	0.5
MUS 236	Guitar Ensemble, Jazz	0.5
MUS 242	Piano Ensemble	0.5
MUS 244	Orchestra	0.5
Jr/Sr		
MUS 409	Chamber Choir	0.5
MUS 412	Wind Ensemble	0.5
MUS 432	Guitar Ensemble, Classical	0.5
MUS 436	Guitar Ensemble, Jazz	0.5
MUS 442	Piano Ensemble	0.5
MUS 444	Orchestra	0.5

Secondary Ensembles: (All courses MUS)

Course	Title	Credits
Fr/Soph		
MUS 202	Concert Choir	0.5
MUS 204	Collaborative Music Ensemble	0.5

MUS 208	Vocal Jazz Ensemble	0.5
MUS 214	Brass Ensemble	0.5
MUS 221	Chamber Ensemble	0.5
MUS 224	Percussion Ensemble	0.5
MUS 231	Pep Band	0.5
MUS 234	Woodwind Ensemble	0.5
MUS 230	Marching Band	0.5
MUS 254	Jazz Ensemble	0.5
Jr/Sr		
MUS 402	Concert Choir	0.5
MUS 404	Collaborative Music Ensemble	0.5
MUS 408	Vocal Jazz Ensemble	0.5
MUS 414	Brass Ensemble	0.5
MUS 421	Chamber Ensemble	0.5
MUS 424	Percussion Ensemble	0.5
MUS 431	Pep Band	0.5
MUS 434	Woodwind Ensemble	0.5
MUS 430	Marching Band	0.5
MUS 454	Jazz Ensemble	0.5

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

[1] For courses designated, equivalent graduate-level courses toward the Master of Education-Music concentration degree are offered in pursuit of initial teachers' certification. ED 489 Student Teaching K-12 (6-12 c.h.) may be taken for 6 hours with co-registration in MUS 594 Field Experience (6 c.h.) for 6 hours.

[2] The Bachelor of Arts in Music Core Courses and ED 202 Foundations of Education (3 c.h.) and ED 301 Frameworks of Teaching (4 c.h.) are required prerequisites for students completing initial teachers' certification in K-12 Music (for additional requirements, refer to the Graduate School and Department of Education portions of the Catalog).

Students completing a major in Music with an concentration in K-12 Education are required to complete a minor in education and meet all other requirements outlined by the Teacher Education Program.

There are additional licensure requirements; consult the Teacher Education Program for details.

Elective Performance Certificate within the Music K-12 Education Concentration

The Department of Music awards the *Performance Certificate within the Music K-12 Education concentration* for completion of the following applied music course work. Hours toward the Performance Certificate are earned above and beyond credit hours required for the BA Music with Music K-12 Education concentration degree.

Specific Requirements

Course	Title	Credits
Select at least 2 additional hours of applied music at the Junior or Senior level		2
Completion of Senior Recital		2
Total Credits		**4**

The University does not transcript certificates, so records of the *Performance Certificate within the Music K-12 Education concentration* and the issuance of the certificate are administered by the Music Department.

Specific Requirements for the Secondary and K-12 Teaching Endorsements/Minor

The student must complete an appropriate major and the following Education courses:

Course	Title	Credits
Select one of the following:		3
PSYC 151	Human Development (GT-SS3)	3
PSYC 251	Childhood and Adolescence	3
PSYC 342	Educational Psychology	3
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology [2]	3
ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
RDG 435	Disciplinary Literacy [3, 5]	4
Special Methods in Endorsement Areas (Prerequisites - Admission to Education) [5]		4
ED 412	Teaching Diverse Learners [4, 5]	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
or ED 489	Student Teaching K-12	
Total Credits [3]		37-40

[1] Music students may take PSYC 151 Human Development (GT-SS3) (3 c.h.)or PSYC 251 Childhood and Adolescence (3 c.h.).

[2] Music Education students may complete MUS 103 Music and Computer Technology I (1 c.h.) and MUS 306 Technology for Music Educators (2 c.h.) for ED 280 Educational Media and Technology (3 c.h.).

[3] English/Language Arts student must also complete RDG 410 Teaching Reading (3 c.h.)

[4] Physical Education students may complete EPER 465 Adapted Physical Education (3 c.h.) or ED 412 Teaching Diverse Learners (3 c.h.).

[5] GPA of 2.6 required

Music: Music Performance Concentration, Bachelor of Arts

Expected Student Outcomes

Upon completion of the Bachelor of Arts degree in Music, students will:

- Read, analyze, and perform music with fluency in at least one performance medium and in a variety of performance styles;
- Use the piano proficiently as an instrument for independent study of music theory, analysis of scores, and preparation of compositions or arrangements, as appropriate to the common tasks of a professional musician;
- Demonstrate proficiency in aural recognition and analysis of music, and in singing musical lines at sight, as appropriate to the common tasks of a professional musician;
- Recognize and describe representative selections of music from all the significant style periods and genres of western art music; and

- Create arrangements and original compositions utilizing the recognized ranges and idioms of orchestral and band instruments and of vocal ensembles.

In addition, students in the *Performance concentration* program will:

- Conduct large and small ensembles in their primary performance medium;
- Prepare and present in public a wide selection of repertoire representative of the highest standard of performance technique and style appropriate to young professional artists; and
- In conjunction with recital performances, prepare scholarly program notes on the repertoire being presented and work closely with administrative staff to complete the copy and format of professional publicity documents.

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 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 concentration areas of Performance or Music Education are required to present recitals appropriate to their degree program and (for Music Education) to pass the national standardized PRAXIS examination.

Specific Program Requirements

General Education: 35

NOTE: must also complete the World Language Requirement. Because of the unique use of world languages in musical contexts (vocal repertoire in particular), students earning the Bachelor of Arts degree in Music may, in consultation with their advisor, complete the BA degree World Language Requirement with two 101-level World Language courses, chosen from Italian, German, French and Spanish.

NOTE: must include MUS 118 Music Appreciation (GT-AH1) (3 c.h.).
In addition, all students must participate in appropriate Primary and Secondary ensembles as assigned each semester, except when Student Teaching.

Course	Title	Credits
Music Core Requirements		
Music Core		54
General Education Requirements		
General Education [1]		35
Music Performance Concentration Requirements		
MUS 350	Theory V	2
MUS x01	Music Performance Symposium (2 semesters)	0
MUS 349	Junior Recital	2
MUS 470-489	Senior Recital	2
MUS xxx	Primary Ensemble (2 semesters, upper division)	2
MUS 359	Advanced Conducting	2
Note: Vocal students must also complete the following:		
MUS 323	English, Italian, & Latin Diction for Singers	2
Note: Piano students must also complete the following:		
MUS 346	Piano Literature [2]	2
MUS 347	Piano Pedagogy	2
Note: Guitar students must also complete the following:		
MUS 152	Jazz Improvisation I	2
MUS 252	Jazz Improvisation II	2
MUS 326	Guitar Physiology and Technique	2
MUS 327	Guitar Ped II: Adv Sight Reading	2
Electives		
Electives		13
Total Credits		**126**

[1] NOTE: must also complete second semester level of a World Language.
[2] Substitute for 2 credits of Functional Piano, MUS 127 Functional Piano I: Beginning (1 c.h.) and MUS 227 Func. Piano II: Int/Proficiency (1 c.h.).

Specific Core Requirements

Course	Title	Credits
MUS Courses		
MUS 150	Music Theory I	3
MUS 151	Aural Skills I	2
MUS 210	Music Theory II	3
MUS 211	Aural Skills II	2
MUS 250	Music Theory III	3
MUS 251	Aural Skills III	2
MUS 280	Music Theory IV	3
MUS 281	Aural Skills IV	2
MUS 305	Music History I	3
MUS 355	Music History II	3
MUS x01	Music Performance Symposium (6 semesters)	0
MUS xxx	Primary Ensemble (6 semesters, 2 upper division) [1]	6
MUS xxx	Secondary Ensemble (2 semesters, 1 upper division) (**Note**: Music Ed concentration exempt from this credit requirement) [2]	2
MUS xxx	Major Applied Lesson (6 semesters, 2 upper division) (Music Ed concentration completes 5 Semesters and Junior Lecture Recital)	12
MUS 127	Functional Piano I: Beginning (May be repeated; may be waived for Music Education majors)	1

MUS 229	Piano Proficiency Completion	1
MUS 103	Music and Computer Technology I	1
MUS 303	Music and Computer Technology II [3]	1
or MUS 306	Technology for Music Educators	
MUS 357	Orchestration and Arranging	2
MUS 358	Basic Conducting	2
Electives		
Free Electives		13
Total Credits		**67**

1. **Primary Ensembles:** (All courses MUS) - See chart below.
2. **Secondary Ensembles:** (All courses MUS) - See chart below.
3. **Note:** Music Education majors must take MUS 306 Technology for Music Educators (2 c.h.).

Note: MUS 306 Technology for Music Educators (2 c.h.) may be waived with completion of an appropriate 500-level Education Technology course toward the Master of Education degree and 2 additional hours of music electives.

Note: Piano students complete either of the following in lieu of Functional Piano courses:

MUS 346 Piano Literature (2 c.h.) OR MUS 347 Piano Pedagogy (2 c.h.)

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.

Performance Skills

The attainment of an appropriate level of performance skills is required in order to function successfully as a musician. The minimum *Performance Standards*, which appear on the music department's web site and in the music department student handbook, provide representative examples of music literature and repertoire and must be successfully completed for each of the musical areas of performance concentration.

Admission to Upper Division

All music majors must qualify for admission to Upper Division (junior-level) study leading to the specific degree by successfully completing the Junior Qualifying Exam at the end of their sophomore year. In addition, all music majors will be required to pass MUS 229 Piano Proficiency Completion (1 c.h.) before performing an upper level recital, student teaching, or graduating. See the *Department of Music Student Handbook* for specific information regarding these evaluations.

Standards

Knowledge of specific subject areas, as recommended by the National Association of Schools of Music in music education, music theory, music history, music technology, and music performance will be measured through outcomes-testing.

Ensemble Registration and Requirements

The real-life performance experience provided by CSU Pueblo ensembles is paramount to the professional training of our Music majors. University ensembles are also the 'public face' of the Department of Music and student participation is essential to our collective success.

At minimum, Music majors and scholarship recipients are required to participate in two ensembles every semester in residence. Applied Music registration and registration in upper division Music courses will not be permitted without the requisite ensemble registration.

Ensemble Registration Specific to the Major

General BA Music majors are to select an ensemble experience tailored toward their long-term professional goals, with a minimum of 6 hours of primary ensemble and 2 semesters of secondary ensemble credit required. A minimum of 2 semesters of Primary ensemble and 1 semester of Secondary ensemble must be earned at the upper division level (during the Junior or Senior year).

Music Education majors are to pursue a breadth of ensemble experiences, including Marching Band as this is an area all Music Education graduates are certified to teach. Music Education majors complete a minimum of 6 semesters of Primary Ensemble, with at least 2 semesters earned at the upper division level. Wind and Percussion Music Education majors are required to participate in Marching Band for two semesters, during the fall semester of their freshman and sophomore years (or first two years enrolled in the major). Music Education majors in other instrumental areas or voice are required to participate in Marching Band for one semester on a secondary instrument following an audition or successful completion of a related techniques class. All Music Education majors are required to participate in at least one instrumental ensemble and one vocal ensemble during their CSU Pueblo tenure.

Performance majors are to pursue an ensemble experience focused on their specific instrument, with a minimum of 8 Primary and 2 Secondary ensembles required (with a minimum of 4 Primary ensembles and 1 Secondary ensemble earned at the upper division level).

Ensemble Registration Specific to a Student's Principal Instrument and Scholarship Status

Wind and Percussion instrumental principals are required to participate in Marching Band for two semesters, during the fall semester of their freshman and sophomore years (or first two years enrolled in the major) as well as Wind Ensemble every semester they are registered for applied music. Voice principals are required to participate in Concert and Chamber choirs every semester in residence. String principals are required to participate in Orchestra and Chamber Music every semester they are registered for applied music. Percussion principals are required to participate in Percussion Ensemble every semester they are registered for applied music. Guitar principals are required to participate in at least one Guitar Ensemble every semester they are registered for applied music.

Applied instructors have a vested interest in the ensemble selection of their students and additional instrumental areas may have additional ensemble requirements. Students should consult their applied instructors for specific ensemble requirements of their applied studio. Participation in excess of three ensembles in any given semester is at the discretion of the applied instructor.

Music scholarship recipients, regardless of major, are required to participate in a minimum of two ensembles each semester. Wind and Percussion Scholarship recipients are required to participate in Marching Band during the fall semester of their freshman and sophomore years (or first two years of receiving a Music scholarship).

Exceptions to ensemble policies must be approved by the Chair of Music in consultation with ensemble directors. Ensemble assignments for all students are at the direction and discretion of the Music faculty and may require an audition.

Primary Ensembles: (All courses MUS)

Course	Title	Credits
Fr/Soph		
MUS 209	Chamber Choir	0.5
MUS 212	Wind Ensemble	0.5
MUS 232	Guitar Ensemble, Classical	0.5
MUS 236	Guitar Ensemble, Jazz	0.5
MUS 242	Piano Ensemble	0.5
MUS 244	Orchestra	0.5
Jr/Sr		
MUS 409	Chamber Choir	0.5
MUS 412	Wind Ensemble	0.5
MUS 432	Guitar Ensemble, Classical	0.5
MUS 436	Guitar Ensemble, Jazz	0.5
MUS 442	Piano Ensemble	0.5
MUS 444	Orchestra	0.5

Secondary Ensembles: (All courses MUS)

Course	Title	Credits
Fr/Soph		
MUS 202	Concert Choir	0.5
MUS 204	Collaborative Music Ensemble	0.5
MUS 208	Vocal Jazz Ensemble	0.5
MUS 214	Brass Ensemble	0.5
MUS 221	Chamber Ensemble	0.5
MUS 224	Percussion Ensemble	0.5
MUS 231	Pep Band	0.5
MUS 234	Woodwind Ensemble	0.5
MUS 230	Marching Band	0.5
MUS 254	Jazz Ensemble	0.5
Jr/Sr		
MUS 402	Concert Choir	0.5
MUS 404	Collaborative Music Ensemble	0.5
MUS 408	Vocal Jazz Ensemble	0.5
MUS 414	Brass Ensemble	0.5
MUS 421	Chamber Ensemble	0.5
MUS 424	Percussion Ensemble	0.5
MUS 431	Pep Band	0.5
MUS 434	Woodwind Ensemble	0.5
MUS 430	Marching Band	0.5
MUS 454	Jazz Ensemble	0.5

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

Art, Research, & Creativity (ARC)

Course	Title	Credits
ARC 110	Integrated Studies	3
ARC 174	Fundamentals of Digital Media	3
ARC 310	Critical Fundamental Skills Review	1
ARC 410	Senior Capstone Presentation	1
Total Credits		**8**

Organ Performance Studies, Minor

Specific Program Requirements

Course	Title	Credits
Required Core Courses		
MUS 277	Applied Organ, Major (four semesters: 2-2-2-2)	8
MUS 169	Applied Voice, Non-Major (two semesters: 1-1)	2
MUS 113	Vocal Techniques and Diction	1
MUS 498	Internship (three semesters: 1-1-1) [1]	3
Ensemble Participation		
MUS 204/404	Collaborative Music Ensemble (four semesters: 1-1-1-1)	4
Total Credits		**18**

[1] The music internships will provide opportunities for professional, firsthand experience of music making in traditional church music programs. Internship opportunities coordinated with local churches will include work with adult choirs (1 credit hour), handbell choirs (1 credit hour), as well as service organ playing (1 credit hour).

Music majors completing minors in Music Technology, Composition/Theory, Jazz Studies, or Organ Performance must complete a minimum of 18 hours beyond required courses of the BA-Music (General Emphasis) degree, to include required hours in the minor and any electives beyond major and minor degree requirements. These hours fulfill the College of Humanities, Arts and Social Sciences (CHASS) graduation requirements that 18 hours must be taken in a minor or in courses outside the major discipline.

Piano Pedagogy, Minor

Specific Program Requirements

Course	Title	Credits
Required Core Courses		
MUS 346	Piano Literature	2
MUS 347	Piano Pedagogy	2
MUS 426	Advanced Piano Pedagogy	2
MGMT 414	Entrepreneurship [1]	3
MUS 427	Piano Pedagogy Practicum (2-2-2)	6
PSYC 151	Human Development (GT-SS3)	3
Total Credits		**18**

[1] Prerequisite of MKTG 340

Music majors completing minors in Music Technology, Composition/Theory, Jazz Studies, or Organ Performance must complete a minimum of 18 hours beyond required courses of the BA-Music (General Emphasis) degree, to include required hours in the minor and any electives beyond major and minor degree requirements. These hours fulfill the College of Humanities, Arts and Social Sciences (CHASS) graduation requirements that 18 hours must be taken in a minor or in courses outside the major discipline.

Music, Sound, & Audio Production, Minor

Specific Program Requirements

Course	Title	Credits
Required Core Courses		**12**
MUS 105	Music Fundamentals & Foundations	3
or MUS 150	Music Theory I	
MAE 230	Sound, Radio, & Podcasting Essentials	3
MAE 330	Sound Recording & Technology	3
MAE 333	Live Sound Reinforcement	3
Electives [1]		**6**
Select a minimum of 6 credits from the following:		
Applied Music Elective	Choose any applied music lesson with instructor approval.	1-2
MUS 103	Music and Computer Technology I	1
MUS 127	Functional Piano I: Beginning	1
MUS 180	Introduction to Composition	1
MUS 303	Music and Computer Technology II	1
ART 274	Art & Design Essentials	3
MAE 240	Film & Video Essentials	3
MAE 251	Gaming & Immersive Media Essentials	3
MAE 332	Critical Listening & Analysis	3
MAE 334	Electronic Music, MIDI, & Synthesis	3
MAE 335	Advanced Radio & Podcasting	3
MAE 381	Creative Careers & Talent Management	3
MAE 382	Concerts, Festivals, & Events	3
MAE 430	Sound Recording, Mixing, & Mastering	3
MAE 431	Sound for Picture	3
MAE 434	Immersive & Game Sound Design	3
MAE 480	Copyright, Licensing, & Publishing	3
Total Credits		**18**

[1] Additional elective courses may be approved for students in consultation with your advisor.

Non Profit Administration

Mission

The nonprofit administration minor is a 24-credit multi-disciplinary program designed for students wanting to pursue careers in nonprofit organizations that include the arts, human services, recreation, chambers of commerce, civic efforts, and health care. The nonprofit administration minor supports the mission of the university by providing students with an educational experience that strengthens their problem-solving abilities and prepares them to navigate work in a rapidly changing world.

Three student learning outcomes are directly related to the mission of the nonprofit administration minor:

1. Identify basic components in nonprofit organizations;
2. Develop a strategic plan for a new nonprofit organization;
3. Apply knowledge of nonprofit organizations within an internship setting.

A variety of suggested electives allows student to focus their coursework toward the type of nonprofit career they desire. Elective courses allow for student choice. An internship in a nonprofit organization is also required and can be coordinated with the student's major area of study.

Academic Programs

- Non Profit Administration, Minor (p. 344)

Non-Profit Administration (NPA)

NPA 494 Field Experience 3(3-0)
Fall, Spring, Summer.
This course is the required 3-credit field experience for the nonprofit minor.
Prerequisite: MC 215; POLS 330 or POLS 340; PYSC 315 or SOC 423; SW 205.
Corequisites: None.
Registration Information: None.

Non Profit Administration, Minor

The nonprofit administration minor is a 21-credit multi-disciplinary program designed for students wanting to pursue careers in nonprofit organizations that include the arts, human services, recreation, chambers of commerce, civic efforts, and health care. The nonprofit administration minor supports the mission of the university by providing students with an educational experience that strengthens their problem-solving abilities and prepares them to navigate work in a rapidly changing world.

Student Learning Outcomes

- Students will be able to identify the basic components in any nonprofit organization.
- Students will develop a strategic plan for a new nonprofit organization.
- Students will apply knowledge on nonprofit organization in an internship setting.

Outcomes Assessment Activities

Student learning is measured through the development and design of a strategic plan for a new nonprofit organization and through the completion of an internship with a nonprofit organization. Faculty teaching the minor area courses will evaluate each strategic plan developed by students, paying close attention to the student's ability to convey the necessary components of a nonprofit organization. Internship supervisors evaluate students based on their ability to apply what they've learned in their courses into an actual nonprofit setting. Students evaluate how well their courses prepared them for their nonprofit internships. The results of these assessment activities are used to improve program offerings and enhance student learning.

Specific Program Requirements

Course	Title	Credits
Required Foundational Courses		**9**
CID 103	Speaking & Listening	3
MAE 472	Nonprofit Organizations & Communication	3
NPA 494	Field Experience	3

Interest Focus Courses Select 6 credits from below.		**6**
ACCT 101	Accounting for Non-Business Majors	3
ECE 350	Programs for ECE	3
ED 202	Foundations of Education	3
ENG 302	Grant Writing	3
POLS 330	Introduction to Public Administration	3
POLS 340	Public Policy	3
PSYC 315	Industrial/Organizational Psychology	3
SOC 432	Organization Theory	3
SW 205	Social Welfare in the United States (GT-SS1)	3
Electives Select 6 credits not used to fufil above requirements.		**6**
ACCT 101	Accounting for Non-Business Majors	3
ECE 350	Programs for ECE	3
ED 202	Foundations of Education	3
ENG 302	Grant Writing	3
MAE 371	Public Relations	3
MAE 471	Crisis Communications	3
MAE 475	Strategic Communication Campaigns	3
POLS 330	Introduction to Public Administration	3
PSYC 315	Industrial/Organizational Psychology	3
SOC 432	Organization Theory	3
SW 205	Social Welfare in the United States (GT-SS1)	3
Total Credits		**21**

Psychology Department

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.

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.

Academic Programs

Undergraduate Programs

- Psychology, Bachelor of Arts (p. 350)
- Psychology, Bachelor of Science (p. 351)

Minors

- Creative Wellness, Minor (p. 349)
- Psychology, Minor (p. 353)

Certificates

- Nutritional Psychology, Certificate (p. 350)

Psychology (PSYC)

PSYC 100 General Psychology (GT-SS3) 3(3-0)
Fall, Spring, Summer.
Overview of the field of psychology including learning, perception, motivation, emotion, heredity, personality, development, abnormal and psycho-therapy.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS3)

PSYC 103 Introductory Psychology for Majors 3(3-0)
Fall, Spring.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

PSYC 105 (ANTH 105, DS 105, SOC 105, WS 105) Understanding Human Diversity 3(3-0)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

PSYC 151 Human Development (GT-SS3) 3(3-0)
Fall, Spring, Summer.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS3)

PSYC 205 Introduction to Sport Psychology 3(3-0)
Fall.
An introduction to psychological theories and constructs affecting performance, coaching & development in sports and athletics.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

PSYC 207 Quantitative Research Methods I 3(3-0)
Fall, Spring.
Introduction to research development and use of quantitative methods.
Prerequisite: PSYC 100 and PSYC 103.
Corequisites: PSYC 207L.
Registration Information: General Education Math strongly recommended as prerequisite.

PSYC 207L Quantitative Research Methods Lab I 1(0-1)
Fall, Spring.
Introduction to methods of psychological experimentation.
Prerequisite: PSYC 100 and PSYC 103.
Corequisites: PSYC 207.
Registration Information: General Education Math strongly suggested as prerequisite.

PSYC 209 Quantitative Research II 3(3-0)
Fall, Spring.
Continuation of PSYC 207. Focus on research development and quantitative methods.
Prerequisite: PSYC 100 and PSYC 103 and PSYC 207 and PSYC 207L.
Corequisites: PSYC 209L.
Registration Information: General Education Math strongly recommended as prerequisite.

PSYC 209L Quantitative Research Methods Lab II 1(0-1)
Fall, Spring.
Continuation of Quantitative Research Methods Lab I.
Prerequisite: PSYC 100 and PSYC 103 and PSYC 207 and PSYC 207L.
Corequisites: PSYC 209.
Registration Information: General Education Math strongly recommended as prerequisite.

PSYC 212 (WS 212) Psychology of Diversity 3(3-0)
Fall.
To raise awareness of social inequities, promote cultural competency & appreciation of differences.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

PSYC 217 (MAE 217, WS 217) Women & Society 3(3-0)
As Needed.
Statistical overview of the current status of women, followed by examination of theories concerning equality of the sexes.
Prerequisite: PSYC 100.
Corequisite: None.
Registration Information: None.

PSYC 220 Drugs and Behavior 3(3-0)
Fall, Summer.
Principles of drug action with attention to beneficial and harmful uses of drugs.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

PSYC 222 Understanding Animal Behavior (GT-SS3) 3(3-0)
Spring.
Basic comparative and ethological perspectives regarding animal behavior. Scientific techniques for observation of animal behavior may be demonstrated at the Pueblo Zoo.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS3)

PSYC 231 (SOC 231) Marriage & Family Relationships 3(3-0)
Fall, Spring.
Marriage and family from an institutional and relationship perspective: cross-cultural diversity, mate selection, marital dynamics, parenting, divorce, remarriage, emerging patterns.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS)

PSYC 241 Human Sexuality 3(3-0)
Fall.
Psychological and biological aspects of human sexual behavior.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: Sophomore standing required.

PSYC 251 Childhood and Adolescence 3(3-0)
Fall, Spring.
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: PSYC 100.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS)

PSYC 291 Special Topics (1-4 V)
Fall, Spring, Summer.
Special Topics.
Prerequisite: None.
Corequisites: None.
Registration Information: Instructor permission required. Repeatable (6).

PSYC 311 Theories Of Personality 3(3-0)
Fall, Spring.
Major theories of personality and the methods of personality investigation.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 315 Industrial/Organizational Psychology 3(3-0)
Fall, Summer.
Application of the principles of psychology to the workplace, including personnel selection, motivation, group processes, leadership, job analysis, and organization.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 331 Physiological Psychology 3(3-0)
Fall, Spring.
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: PSYC 100.
Corequisites: PSYC 331L.
Registration Information: None.

PSYC 331L Physiological Psychology Lab 1(0-2)
Fall, Spring.
Physiological Psychology Lab.
Prerequisite: PSYC 100.
Corequisites: PSYC 331.
Registration Information: None.

PSYC 333 Animal Behavior & Cognition 3(3-0)
Fall.
Basic comparative and ethological perspectives regarding animal behavior. Scientific techniques for observation of animal behavior may be demonstrated at the Pueblo Zoo, the Nature and Wildlife Discovery Center, and in labs.
Prerequisites: PSYC 100.
Corequisites: PSYC 333L.
Registration Information: None.

PSYC 333L Animal Behavior & Cognition Lab 1(0-2)
Fall.
Basic comparative and ethological perspectives regarding animal behavior. Scientific techniques for observation of animal behavior may be demonstrated at the Pueblo Zoo, the Nature and Wildlife Discovery Center, and labs.
Prerequisites: PSYC 100.
Corequisites: PSYC 333.
Registration Information: None.

PSYC 334 Perception 3(3-0)
Fall, Spring.
Senses & how they cooperate w/ the brain to provide awareness & knowledge of world about us. Empirical findings & theoretical analysis of processing five senses. Role of learning in normal & illusory perception considered.
Prerequisite: PSYC 100.
Corequisites: PSYC 334L.
Registration Information: None.

PSYC 334L Perception Lab 1(0-2)
Fall, Spring.
Perception Lab.
Prerequisite: PSYC 100.
Corequisites: PSYC 334.
Registration Information: None.

PSYC 336 Learning and Motivation 3(3-0)
Fall, Spring.
Principles of learning and memory. Empirical findings and theoretical analyses of topics including conditioning, reinforcement and punishment. Research and application.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: Permission of instructor.

PSYC 337 Memory and Cognition 3(3-0)
Fall, Spring.
Theory and research on current topics in cognition, including attention, concept formation, imagery, memory, decision making, language acquisition, problem solving and text comprehension.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 342 Educational Psychology 3(3-0)
Fall, Spring.
The contribution of psychology theory, research and methods to our understanding of teaching and learning.
Prerequisite: PSYC 100 or PSYC 151.
Corequisites: None.
Registration Information: None.

PSYC 351 Psychology of the Exceptional Individual 3(3-0)
Fall.
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: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 352 (SOC 352) Social Psychology 3(3-0)
Fall, Spring.
General and applied psychological principles of the individual's interaction with a group.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 360 Forensic Psychology 3(3-0)
Fall, Spring.
Using social, cognitive, and clinical perspectives, this course will examine individual and interpersonal phenomenon related to memory, judgment, psychological testing, bias, and social influence in the legal field.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 362 Abnormal Psychology 3(3-0)
Fall, Spring, Summer.
Etiology, diagnosis and therapy of maladaptive or abnormal behaviors and mental functioning.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 380 Nutrition for Mental Health Fundamentals 3(3-0)
As Needed.
Explores fundamental concepts for the study of nutrition for mental health, including nutrients, the gut-brain-immune axis, HPA axis, hormones, neurotransmitters, and other related factors, with a focus on emerging research.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

PSYC 382 Personal Food Relationships 3(3-0)
As Needed.
This course explores the value and importance of our personal relationships with food, the scope and impact of diet culture, and the evidence-based practices of Mindful Eating and Intuitive Eating.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

PSYC 384 Food Psychology 3(3-0)
As Needed.
This course explores why we eat the way we do, the complexity of personal food relationships, and the importance of a comprehensive, multidimensional approach for understanding and influencing eating behavior.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

PSYC 401 History and Systems of Psychology 3(3-0)
Fall, Spring.
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: PSYC 100 and PSYC 209 and PSYC 209L.
Corequisites: None.
Registration Information: None.

PSYC 403 Emotional Intelligence 3(3-0)
Fall.
This course examines scientific research from the fields of Affective Neuroscience, Personality and Positive Psychology regarding emotional intelligence, specifically: emotional awareness, expressivity, motivation and regulation.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 405 Positive Psychology 3(3-0)
Fall.
This course examines the latest scientific research constituting positive psychology. Topics include: Well-Being, Gratitude, Empathy, Forgiveness, Hope, Resilience, and Humor.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 428 Cannabinoids as Medicine 3(3-0)
Fall, Spring.
The Cannabis plant has a long history of medical use. This course is intended to be a unique experience to help students to develop a broad understanding of cannabis and its medical uses.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

PSYC 452 (SOC 452) The Individual & Society 3(3-0)
As Needed.
How does our society shape the way we define ourselves and others? This class explores the relationship between the individual and society, and how that relationship affects the choices we make and the actions we take.
Prerequisites: PSYC 100 or PSYC 352 or SOC 101 or SOC 352.
Corequisites: None.
Registration Information: None.

PSYC 463 Psychopathology of Childhood 3(3-0)
Fall.
A survey of the unique conceptual models of etiology, assessment and therapy appropriate to the study of the psychological disorders of childhood.
Prerequisite: PSYC 100 and PSYC 362.
Corequisites: None.
Registration Information: None.

PSYC 464 Systems of Counseling and Psycho-Therapy 3(3-0)
Fall.
Traditional and contemporary theories of counseling and psychotherapy through use of case studies and other selected materials.
Prerequisite: PSYC 100 and PSYC 311 and PSYC 362.
Corequisites: PSYC 464L.
Registration Information: Permission of instructor.

PSYC 464L Systems of Counselng & Psycho-therapy Lab 1(0-2)
Fall.
Systems of Counseling & Psycho-therapy Lab.
Prerequisite: PSYC 100 and PSYC 311 and PSYC 362.
Corequisites: PSYC 464.
Registration Information: None.

PSYC 465 Behavior Modification 3(3-0)
Spring.
Advanced methods and techniques of behavior modification as practiced in various agencies and institutions.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: Junior or senior standing required.

PSYC 471 Clinical Psychology 3(3-0)
Spring.
Survey of clinical psychology as a profession. Training requirements, opportunities, future directions, current research and ethical problems.
Prerequisite: PSYC 100 and PSYC 362.
Corequisites: None.
Registration Information: Junior or senior standing required.

PSYC 475 Group Process 3(3-0)
Spring.
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: PSYC 100 and PSYC 311 and PSYC 362 and PSYC 464 and PSYC 464L.
Corequisites: None.
Registration Information: Junior or senior standing required.

PSYC 481 Psychology of Trauma 3(3-0)
Fall.
This course is designed to introduce recent research about experienced trauma in individuals. Understanding the history of trauma, the physiological changes in the brain, and responses will be introduced.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor.

PSYC 484 Advanced Nutrition for Mental Health 3(3-0)
As Needed.
In-depth exploration of nutritional factors affective to specific neurological and psychological conditions, with a focus on current and emerging research.
Prerequisites: PSYC 380.
Corequisites: None.
Registration Information: None.

PSYC 486 Botanicals for Mental Health 3(3-0)
As Needed.
Exploration of botanicals and fungi used to manage, support, and treat various mental health conditions. Traditional knowledge systems are considered, then balanced against empirically supported practice.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

PSYC 491 Special Topics (1-3 V)
Fall, Spring, Summer.
Special Topics.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

PSYC 492 Research (1-3 V)
Fall, Spring, Summer.
Faculty directed research project for undergraduate student.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (3).

PSYC 494 Field Experience (1-12 V)
Fall, Spring, Summer.
In-depth, on-the-job experience in psychology, individually designed. Ability to use psychological tests and counseling techniques recommended.
Prerequisite: PSYC 100 and PSYC 311 and PSYC 362 and PSYC 464 and PSYC 464L.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (12).

PSYC 495 Independent Study (1-3 V)
Fall, Spring, Summer.
Independent Study.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (3).

Creative Wellness, Minor

Student Learning Outcomes

1. Collaborate effectively and integrate learning across psychology and arts/humanities disciplines.
2. Comprehend and apply an understanding of positive psychology to promote wellness in the community through creative expression.
3. Practice self-care through experiential learning creative wellness activities.

Specific Program Requirements

Course	Title	Credits
Core Requirements		**9**
ARC 110	Integrated Studies	3
CW 100	Introduction to Creative Wellness	3
PSYC 405	Positive Psychology	3

Course	Title	Credits
Electives	**No more than 6 credits from the same discipline (unless CW).**	**12**
CW 491	Special Topics	1-3
ARC 174	Fundamentals of Digital Media	3
ART 141	Drawing I: Observational Drawing	3
ART 176	Photography: Expressive Composition	3
ART 233	Sculpture I	3
ART 247	Ceramics I	3
ART 274	Art & Design Essentials	3
ART 333	Sculpture II: Site Art	3
ART 347	Ceramics II	3
ART 270	Printmaking I	3
ART 370	Printmaking II	3
ART 242	Drawing II: Life Drawing	3
ART 234	Painting I	3
ART 334	Painting II	3
CS 235	Ballet Folklorico	3
CS 325	Health in the Chicano Community	3
CS 420	Voices of Protest	3
ENG 114	Introduction to Creative Writing (GT-AH1)	3
ENG 315	Creative Writing: Poetry	3
ENG 316	Creative Writing: Fiction	3
ENG 317	Creative Nonfiction	3
ENG 318	Creative Writing: Drama	3
ENG 414	Advanced Creative Writing Workshop	3
MUS 110	Music and Audio Production I	2
MUS 125	Piano Class for Non-Majors	1
MUS 130	Guitar Class	1
MUS 152	Jazz Improvisation I	2
MUS 169	Applied Voice, Non-Major	1

MUS 208	Vocal Jazz Ensemble	.5
MUS 207	University Band	.5
MUS 209	Chamber Choir	.5
PSYC 403	Emotional Intelligence	3
SW 328	Spirituality and Social Work	3
SOC 315	Health, Culture, and Society	3
SOC 452	The Individual & Society	3
HS 320	Evaluation of Health Issues	3
HS 322	Health Coaching Concepts	3
EPER 102	Mountain Orientation	2
EPER 103	Winter Orientation	2
EPER 104	Desert Orientation	2
EPER 105	Canyon Orientation	2
EPER 107L	Triathlon	1
EPER 108L	Yoga	1
EPER 112L	Rock Climbing	1
EPER 123L	Zumba	1
EPER 124L	Tai Chi	1
EPER 116L	Camping	1
EPER 117L	Backpacking	1
EPER 118L	Fly Fishing	1
EPER 119L	Walking for Fitness	1
EPER 127L	Jogging	1
EPER 128L	Aerobics	1
EPER 143L	Folk, Square, and Ballroom Dance	1
EPER 162	Personal Health	3
EPER 162L	Personal Health Lab	1
EPER 249	Challenge Course Leadership	2
EPER 222	Behavior Facilitation	3

Nutritional Psychology, Certificate

Student Learning Outcomes

1. Students will understand and be able to discuss the relationship between nutrition and mental health.
2. Students will be able to navigate current and emerging research and consider its application to personal wellness and clinical practice.
3. Students will understand how to integrate practical concepts into daily living and professional practice.

Specific Program Requirements

Course	Title	Credits
PSYC 380	Nutrition for Mental Health Fundamentals	3
PSYC 484	Advanced Nutrition for Mental Health	3
Select two courses from the following:		**6**
PSYC 382	Personal Food Relationships	3
PSYC 384	Food Psychology	3
PSYC 428	Cannabinoids as Medicine	3
PSYC 486	Botanicals for Mental Health	3
Total Credits		**12**

Psychology, Bachelor of Arts

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

- Identify the major concepts and historical trends in psychology and evaluate theoretical perspectives.
- Apply basic research methods and ethical values in psychology, including design, data analysis using SPSS, and interpretation of results.
- Communicate effectively verbally and in writing including APA style.
- Students will act ethically and responsibly—both individually and with others—demonstrating an awareness of and respect for diversity.
- Implement psychological knowledge, skills and values in occupational pursuits in a variety of settings that meet personal goals and societal needs.

These expected learning outcomes apply for both the BA and the BS degrees in psychology.

Outcome Assessment Activities

- The presentation of an empirically-based research project immediately following PSYC 209 Quantitative Research II (3 c.h.)/PSYC 209L Quantitative Research Methods Lab II (1 c.h.). 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.

Specific Program 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.

Students must complete all of the major degree requirements. In addition, students must complete the world language requirements as stated in the *Academic Policies* section of the University catalog beyond their general education courses. This requirement includes completion of the second level of a world language, or completion of WL 100 Intro to Comparative Linguistics (3 c.h.) and ANTH 106 Language, Thought and Culture (3 c.h.)/ENG 106 Language, Thought and Culture (3 c.h.), or completion of the first and second level of American Sign Language. Psychology majors will be required to complete a minor to fulfill the CHASS requirements of 18 credits outside of the major beyond their

major requirements and the general education requirements. Please note: PSYC 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 PSYC 207 Quantitative Research Methods I (3 c.h.) & PSYC 209 Quantitative Research II (3 c.h.). Successful completion of PSYC 207 Quantitative Research Methods I (3 c.h.) is the prerequisite for PSYC 209 Quantitative Research II (3 c.h.). PSYC 401 History and Systems of Psychology (3 c.h.) should not be taken until the senior year, preferably in the last semester before graduation.

Note

- A maximum of 6 credit hours of field experience and/or independent study may be applied towards the required 42 total hours in psychology.
- Students may take PSYC 491 Special Topics (1-3 c.h.) an unlimited number of times; however, only six credits may count toward the psychology major.

Upper Division Requirement

Psychology majors must take a minimum of 24 credits of upper-division coursework in psychology.

GPA

A minimum grade of C is required in all psychology courses counting toward the psychology major.

Transfer Students

Students transferring from another institution and seeking a degree in Psychology must complete 21 hours of Psychology courses at Colorado State University Pueblo with a minimum grade of C in all psychology courses. Of these 21 hours, a minimum of 12 must be upper-division credit.

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.

Specific Core Requirements

Course	Title	Credits
PSYC 100	General Psychology (GT-SS3)	3
PSYC 103	Introductory Psychology for Majors	3
PSYC 207 & 207L	Quantitative Research Methods I and Quantitative Research Methods Lab I	4
PSYC 209 & 209L	Quantitative Research II and Quantitative Research Methods Lab II	4
PSYC 401	History and Systems of Psychology	3
Select two of the following:		**6**
PSYC 311	Theories Of Personality	3
PSYC 352	Social Psychology	3
PSYC 362	Abnormal Psychology	3
Select one of the following:		**3**
PSYC 336	Learning and Motivation	3
PSYC 337	Memory and Cognition	3
Select one of the following:		**4**
PSYC 331 & 331L	Physiological Psychology and Physiological Psychology Lab	4
PSYC 334 & 334L	Perception and Perception Lab	4
Select one of the following:		**3**
PSYC 315	Industrial/Organizational Psychology	3
PSYC 342	Educational Psychology	3
PSYC 471	Clinical Psychology	3
Electives		**9**
Select 9 credits from the list of Psychology Electives		
Total Credits		**42**

Electives

Course	Title	Credits
PSYC 151	Human Development (GT-SS3)	3
PSYC 205	Introduction to Sport Psychology	3
PSYC 212	Psychology of Diversity	3
PSYC 217	Women & Society	3
PSYC 220	Drugs and Behavior	3
PSYC 222	Understanding Animal Behavior (GT-SS3)	3
PSYC 231	Marriage & Family Relationships	3
PSYC 241	Human Sexuality	3
PSYC 251	Childhood and Adolescence	3
PSYC 291	Special Topics	1-4
PSYC 351	Psychology of the Exceptional Individual	3
PSYC 403	Emotional Intelligence	3
PSYC 405	Positive Psychology	3
PSYC 463	Psychopathology of Childhood	3
PSYC 464 & 464L	Systems of Counseling and Psycho-Therapy and Systems of Counselng & Psycho-therapy Lab	4
PSYC 465	Behavior Modification	3
PSYC 475	Group Process	3
PSYC 491	Special Topics	1-3
PSYC 492	Research	1-3
PSYC 494	Field Experience	1-12
PSYC 495	Independent Study	1-3

Psychology, Bachelor of Science

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

- Identify the major concepts and historical trends in psychology and evaluate theoretical perspectives.
- Apply basic research methods and ethical values in psychology, including design, data analysis using SPSS, and interpretation of results.
- Communicate effectively verbally and in writing including APA style.
- Students will act ethically and responsibly—both individually and with others—demonstrating an awareness of and respect for diversity.
- Implement psychological knowledge, skills and values in occupational pursuits in a variety of settings that meet personal goals and societal needs.

These expected learning outcomes apply for both the BA and the BS degrees in psychology.

Outcome Assessment Activities

- The presentation of an empirically-based research project immediately following PSYC 209 Quantitative Research II (3 c.h.)/PSYC 209L Quantitative Research Methods Lab II (1 c.h.). 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.

Specific Program Requirements

Specific Core 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.

Course	Title	Credits
Basic Core Requirements		
PSYC 100	General Psychology (GT-SS3)	3
PSYC 103	Introductory Psychology for Majors	3
PSYC 207 & 207L	Quantitative Research Methods I and Quantitative Research Methods Lab I	4
PSYC 209 & 209L	Quantitative Research II and Quantitative Research Methods Lab II	4
PSYC 401	History and Systems of Psychology	3
Select two of the following:		6
PSYC 311	Theories Of Personality	3
PSYC 352	Social Psychology	3
PSYC 362	Abnormal Psychology	3
PSYC 336	Learning and Motivation	3
or PSYC 337	Memory and Cognition	
Select one of the following:		4
PSYC 331 & 331L	Physiological Psychology and Physiological Psychology Lab	4
PSYC 334 & 334L	Perception and Perception Lab	4
Select one of the following:		3
PSYC 315	Industrial/Organizational Psychology	3
PSYC 342	Educational Psychology	3
PSYC 471	Clinical Psychology	3
PSYC ELECTIVES		
Select 9 credits of Psychology Electives		9
Total Credits		**42**

PSYC Electives

Course	Title	Credits
PSYC 151	Human Development (GT-SS3)	3
PSYC 205	Introduction to Sport Psychology	3
PSYC 212	Psychology of Diversity	3
PSYC 220	Drugs and Behavior	3
PSYC 222	Understanding Animal Behavior (GT-SS3)	3
PSYC 231	Marriage & Family Relationships	3
PSYC 241	Human Sexuality	3
PSYC 251	Childhood and Adolescence	3
PSYC 291	Special Topics	1-4
PSYC 351	Psychology of the Exceptional Individual	3
PSYC 403	Emotional Intelligence	3
PSYC 405	Positive Psychology	3
PSYC 463	Psychopathology of Childhood	3
PSYC 464 & 464L	Systems of Counseling and Psycho-Therapy and Systems of Counselng & Psycho-therapy Lab	4
PSYC 465	Behavior Modification	3
PSYC 475	Group Process	3
PSYC 491	Special Topics	1-3
PSYC 492	Research	1-3
PSYC 494	Field Experience	1-12
PSYC 495	Independent Study	1-3

Psychology majors will be required to complete a minor to fulfill the CHASS requirements of 18 credits outside of the major beyond their major requirements and the general education requirements. Please note: PSYC courses cannot be included in this total.

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. EPER 162 Personal Health (3 c.h.) and EPER 162L Personal Health Lab (1 c.h.) cannot be used to satisfy the additional science requirement.

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 PSYC 207 Quantitative Research Methods I (3 c.h.) & PSYC 209 Quantitative Research II (3 c.h.). Successful completion of PSYC 207 Quantitative Research Methods I (3 c.h.) is the prerequisite for PSYC 209 Quantitative Research II (3 c.h.). PSYC 401 History and Systems of Psychology (3 c.h.) should not be taken until the senior year, preferably in the last semester before graduation.

Note

- A maximum of 6 credit hours of field experience and/or independent study may be applied towards the required 42 total hours in psychology.
- Students may take PSYC 491 Special Topics (1-3 c.h.) an unlimited number of times; however, only six credits may count toward the psychology major.

Upper Division Requirement

Psychology majors must take a minimum of 24 credits of upper-division coursework in psychology.

GPA

A minimum grade of C is required in all psychology courses counting toward the psychology major.

Transfer Students

Students transferring from another institution and seeking a degree in Psychology must complete 21 hours of Psychology courses at Colorado State University Pueblo with a minimum grade of C in all psychology courses. Of these 21 hours, a minimum of 12 must be upper-division credit.

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.

Psychology, Minor

Specific Program Requirements

Course	Title	Credits
PSYC 100	General Psychology (GT-SS3)	3
Select 9 credits of upper-division psychology coursework		9
Select 9 additional credits of psychology coursework		9
Total Credits		**21**

- Credits in PSYC 492 Research (1-3 c.h.), PSYC 494 Field Experience (1-12 c.h.) and PSYC 495 Independent Study (1-3 c.h.) do not count toward the minor.
- A minimum grade of C in all psychology courses counting toward the minor.
- PSYC 491 Special Topics (1-3 c.h.) may be taken once to count toward the minor.
- Transfer students must complete 9 credits upper-division coursework in Psychology at CSU Pueblo.

Social Work Department

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.

Academic Programs

Undergraduate Programs

- Social Work, Bachelor of Social Work (p. 358)

Graduate Programs

- Social Work, Masters of Social Work (p. 360)

Social Work (SW)

SW 100 Introduction to Social Work 3(3-0)
Fall, Spring, Summer.
Introduction to the history and philosophy of the social work profession including the knowledge, values, ethics, roles and skills inherent in social work practice.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SW 201 Human Behavior and Social Environment I 3(3-0)
Fall, Summer.
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: None.
Corequisites: PSYC 100 and/or SOC 101 and SW 100.
Registration Information: None.

SW 202 Human Behavior and Social Environment II 3(3-0)
Spring, Summer.
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.
Corequisites: None.
Registration Information: None.

SW 205 Social Welfare in the United States (GT-SS1) 3(3-0)
Fall, Spring, Summer.
Examines the historical development of social work in the United States social welfare system. Critical thinking techniques will be used to analyze policy.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS1)

SW 210 Statistics for Social Worker 3(3-0)
Fall, Spring.
Introduction to qualitative and quantitative data analysis. Emphasis on descriptive and inferential statistics most utilized in evidence-based social work practice and research.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SW 222 Introduction to Community Practice 3(2-2)
Fall, Spring.
Application of the foundation of generalist practice skills. Requires 45 clock hours of volunteer work in an approved human service agency.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SW 225 Social Work Policies and Procedures 1(1-0)
Fall, Spring, Summer.
Provides fundamental knowledge for social work majors. Includes ethics, handbook, and standards.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SW 230 (CS 230) Chicano: Social and Psychological Study (GT-SS3) 3(3-0)
Fall.
Social and psychological forces present in the Chicano community.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS3) (CC)

SW 275 Special Populations for Peace Officers 3(3-0)
As Needed.
Content on diversity, law, policy, communication, and police procedures. Course is reserved for Peace Officers completing the Police Academy. Credit is awarded concurrently in CRIM, POLS, & SW.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SW 290 Special Projects (1-5 V)
As Needed.
Special Projects.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

SW 301 Professional Writing in Social Work 3(3-0)
Fall, Summer.
Ethical and professional documentation for case records and publication in social work practice. Emphasis on current documentation practices and APA writing.
Prerequisite: PSYC 100 and SOC 101 and SW 100 and SW 201 and SW 202 and SW 205.
Corequisite: None. Registration Information: A course in human biology, a political science OR economics course with grade of C or higher. Social Work Major GPA of 2.5 or higher.

SW 310 Social Work Theory 3(3-0)
Fall, Summer.
A comparative approach to explanatory and practice theories relating to social work and the helping professions.
Prerequisite: PSYC 100 and SOC 101 and SW 100 and SW 201 and SW 202 and SW 205.
Corequisites: None.
Registration Information: A course in human biology, a political science OR economics course with grade of C or higher. Social Work Major GPA of 2.5 or higher.

SW 320 Human Diversity in Practice 3(3-0)
Spring.
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: PSYC 100 and SOC 101 and SW 100 and SW 201 and SW 202 and SW 205.
Corequisites: CS 101 or CS 230.
Registration Information: A course in human biology, a political science OR economics course, and a course in Women's studies with grade of C or higher. Social Work Major GPA of 2.5 or higher.

SW 322 Social Work Intervention I 3(3-0)
Fall, Summer.
Elements of generalist micro social work practice and theory. Skill development in assessment, intervention, and evaluation emphasized.
Prerequisite: PSYC 100 and SOC 101 and SW 100 and SW 201 and SW 202 and SW 205.
Corequisites: None.
Registration Information: A course in human biology, a political science OR economics course with grade of C or higher. Social Work Major GPA of 2.5 or higher.

SW 323 Social Work Intervention II 3(3-0)
Spring.
Generalist mezzo social work practice focusing on small groups and families. Includes assessment, intervention, evaluation, and practice theory.
Prerequisite: PSYC 100 and SOC 101 and SW 100 and SW 201 and SW 202 and SW 205.
Corequisites: None.
Registration Information: A course in human biology, a political science OR economics course with grade of C or higher. Social Work Major GPA of 2.5 or higher.

SW 324 Social Work Intervention III 3(3-0)
Spring, Summer.
Social work theories and interventions at the macro level; community and organization generalist practice.
Prerequisite: PSYC 100 and SOC 101 and SW 100 and SW 201 and SW 202 and SW 205.
Corequisites: None.
Registration Information: A course in human biology, a political science OR economics course with grade of C or higher. Social Work Major GPA of 2.5 or higher.

SW 325 (CS 325) Health in the Chicano Community 3(3-0)
Spring.
Health care traditions and current health care systems in the barrio.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SW 326 SW Practice with Older Adults 3(3-0)
As Needed.
The biological, psychological, social, cultural and spiritual aspects of aging and the services affecting them.
Prerequisite: None.
Corequisites: None.
Registration Information: Junior standing or consent from instructor.

SW 327 Child Welfare 3(3-0)
As Needed.
The physical, behavioral, emotional signs of child abuse and neglect; laws designed to protect children, and services available to assist them.
Prerequisite: None.
Corequisites: None.
Registration Information: Junior standing. Permission of instructor.

SW 328 Spirituality and Social Work 3(3-0)
As Needed.
Focus on spirituality as "making meaning" and its influence on the personal and professional aspects of social work education and practice.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SW 329 Rural Social Work 3(3-0)
As Needed.
Examines rural practice, recognizing the integral values of this environment, with an ecological emphasis on clients and their connections in micro, mezzo, and macro systems. Required for IV-E stipend students.
Prerequisite: None.
Corequisites: None.
Registration Information: Junior standing. Permission of instructor.

SW 331 Campus Connections 3(1-2)
Fall, Spring.
This service-learning course will engage students as mentors with local at-risk youth. The course will combine lab sessions working directly with youth with academic coursework that is both reflective and applied.
Prerequisite: None.
Corequisite: None.
Registration Information: Submit an application, attend an informational session, and pass a background check. Repeatable (9).

SW 340 Reintegration for Military Families 3(3-0)
As Needed.
Critically examines the history, culture, strengths, and barriers in social work practice with clients who have served in the military and their family members.
Prerequisite: SW 100.
Corequisites: None.
Registration Information: None.

SW 341 Impact of Trauma in Social Work 3(3-0)
As Needed.
Focus on the dimensions of "trauma," formulating client assessments based on research, and evaluating impact of trauma/secondary effects on oneself as a professional helper. Required for IV-E Stipend students.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SW 350 Social Welfare Policy 3(3-0)
Fall.
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: PSYC 100 and SOC 101 and SW 100 and SW 201 and SW 202 and SW 205.
Corequisites: None.
Registration Information: A course in human biology, a political science OR economics course with grade of C or higher. Social Work Major GPA of 2.5 or higher.

SW 481 Placement Seminar I 3(3-0)
Fall.
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 100 and SW 201 and SW 202 and SW 205 and SW 301 and SW 310 and SW 320 and SW 322 and SW 323 and SW 324 and SW 350.
Corequisites: SW 488.
Registration Information: Admission to Field. Social Work major GPA of 2.5 or higher.

SW 482 Placement Seminar II 3(3-0)
Spring.
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 100 and SW 201 and SW 202 and SW 205 and SW 225 and SW 301 and SW 310 and SW 320 and SW 322 and SW 323 and SW 324 and SW 350 and SW 481 and SW 488.
Corequisites: SW 489.
Registration Information: Admission to field. Social Work major GPA of 2.5 or higher.

SW 488 Placement I 5(0-16)
Fall.
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: None.
Corequisites: SW 481.
Registration Information: Admission to the Social Work Program.

SW 489 Placement II 5(0-16)
Spring.
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: None.
Corequisites: SW 482.
Registration Information: None.

SW 490 Special Projects (1-5 V)
As Needed.
Special Projects.
Prerequisite: None.
Corequisites: None.
Registration Information: Admission to the Social Work Program. Permission of instructor. Repeatable (99).

SW 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

SW 492 Research 3(3-0)
Fall.
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 100 and SW 201 and SW 202 and SW 205 and SW 301 and SW 310 and SW 320 and SW 322 and SW 323 and SW 324 and SW 350.
Corequisite: SW 499.
Registration Information: Instructor permission. Statistics course strongly recommended as prerequisite.

SW 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

SW 499 Research Lab 1(0-1)
Fall.
This course is the required 1-credit project-based lab.
Prerequisite: None.
Corequisites: SW 492.
Registration Information: Admission to Social Work Program.

SW 501 Holistic Human Behavior 3(3-0)
Fall.
Understanding human behavior in the environment. Includes assessment models with emphasis on systems theory and developmental theories.
Prerequisite: None.
Corequisites: SW 502 and SW 502L and SW 520.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 502 Introduction to Social Work & Ethics 3(3-0)
Fall.
Utilizes the NASW Code of Ethics and ethical decision-making models for ethical practice.
Prerequisite: None.
Corequisites: SW 501 and SW 502L and SW 520.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 502L Introduction to Social Work & Ethics Lab 1(0-1)
Fall.
The course introduces students to the practice of social work as well as utilizes the NASW Code of Ethics to help students understand the ethical decision making process through case examples.
Prerequisite: None.
Corequisites: SW 501 and SW 502 and SW 520.
Registration Information: None.

SW 520 Diversity in the Human Experience 3(3-0)
Fall.
Explores diversity of humans and effects in social work practice.
Prerequisite: None.
Corequisites: SW 501 and SW 502 and SW 502L.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 522 Intervention with Individuals 3(3-0)
Spring.
Examines the theories and modalities of assessing and intervening with individuals.
Prerequisite: SW 501 and SW 502 and SW 502L and SW 520.
Corequisites: SW 523 and SW 581 and SW 588.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 523 Intervention with Families & Groups 3(3-0)
Spring.
Examines the theories and modalities of assessing and intervening with families and small groups.
Prerequisite: SW 501 and SW 502 and SW 502L and SW 520 and SW 550.
Corequisites: SW 522 and SW 581 and SW 588.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 524 Intervention with Agency-Community 3(3-0)
Summer.
Examines the theories and modalities of assessing and intervening with organizations and communities.
Prerequisite: SW 501 and SW 502 and SW 502L and SW 520 and SW 522 and SW 523 and SW 581 and SW 588.
Corequisites: SW 550 and SW 582 and SW 589.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 550 Social Welfare Policy & Practice 3(3-0)
Summer.
Studies the history and development of social welfare in the United States.
Prerequisite: SW 501 and SW 502 and SW 502L and SW 520 and SW 522 and SW 523 and SW 581 and SW 588.
Corequisites: SW 524 and SW 582 and SW 589.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 581 Seminar I 1(1-0)
Spring.
Integrative seminar addressing professional social work practice issues concurrent with Practicum I.
Prerequisite: SW 501 and SW 502 and SW 502L and SW 520.
Corequisites: SW 522 and SW 523 and SW 588.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 582 Seminar II 1(1-0)
Summer.
Integrative seminar addressing professional social work practice issues concurrent with Practicum II.
Prerequisite: SW 501 and SW 502 and SW 502L and SW 520 and SW 522 and SW 523 and SW 581 and SW 588.
Corequisites: SW 524 and SW 550 and SW 589.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 588 Practicum I 3(3-0)
Spring.
Placement in approved practice setting under MSW supervision for at least 224 clock hours.
Prerequisite: SW 501 and SW 502 and 502L and SW 520.
Corequisites: SW 522 and SW 523 and SW 581.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 589 Practicum II 3(3-0)
Summer.
Placement in approved practice setting under MSW supervision for at least 224 clock hours.
Prerequisite: SW 501 and SW 502 and SW 502L and SW 520 and SW 522 and SW 523 and SW 581 and SW 588.
Corequisites: SW 524 and SW 550 and SW 582.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 622 Assess/Intervene with Individuals 3(3-0)
Fall.
Assessment theories and therapeutic interventions in clinical practice with individuals; includes DSM.
Prerequisite: None.
Corequisites: SW 625 and SW 681 and SW 688.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 624 Assess/Intervene Group/Agency/Community 3(3-0)
Spring.
Theories and models of assessment and intervention in mezzo and macro environments.
Prerequisite: SW 622 and SW 625 and SW 681 and SW 688.
Corequisites: SW 682 and SW 685 and SW 689.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 625 Assess/Intervene with Child/Family 3(3-0)
Fall.
Theories and models of assessment and intervention with children and families. Includes the DSM.
Prerequisite: None.
Corequisite: SW 622 and SW 681 and SW 688.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 641 Understanding Trauma in Practice 3(3-0)
Summer.
Examines the effects of trauma on clients and practitioners. Includes self-care.
Prerequisite: None.
Corequisites: SW 642 and SW 650 and SW 687.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 642 Administration & Supervision 3(3-0)
Summer.
Covers management models, budgeting, administrative functions and models of clinical and nonclinical supervision.
Prerequisite: SW 622 and SW 624 and SW 625 and SW 681 and SW 682 and SW 685 and SW 688 and SW 689.
Corequisites: SW 650 and SW 687.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 643 School Social Work 3(3-0)
Summer.
The role of a School Social Worker is covered. Topics include working with students, group curriculum, and IEPs, 504s, Behavior Intervention Plans, and Functional Behavioral. Assessments satisfy CO school SW guidelines.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

SW 644 Understanding Suicide 3(3-0)
Summer.
Course integrates knowledge, values, skills, and theories related to the impact of suicide on a micro, mezzo, macro level related to social work practice through the examination of diverse populations.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

SW 650 Advanced Policy in a Diverse World 3(3-0)
Summer.
Examines national and international social and public policies. Includes policy analysis and practice.
Prerequisite: SW 622 and SW 624 and SW 625 and SW 681 and SW 682 and SW 685 and SW 688 and SW 689.
Corequisites: SW 642 and SW 687.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 681 Seminar III 1(1-0)
Fall.
Integrative seminar addressing professional social work practice issues concurrent with Practicum III.
Prerequisite: None.
Corequisite: SW 622 and SW 625 and SW 688.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 682 Seminar IV 1(1-0)
Spring.
Integrative seminar addressing professional social work practice issues concurrent with Practicum IV.
Prerequisite: SW 622 and SW 625 and SW 681 and SW 688.
Corequisite: SW 624 and SW 685 and SW 689.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 685 Research in Practice & Agencies 3(3-0)
Spring.
Covers practice and agency evaluation.
Prerequisite: SW 622 and SW 625 and SW 681 and SW 688.
Corequisites: SW 624 and SW 682 and SW 689.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 687 Culminating Project 1(0-4)
Summer.
Present poster of completed integrated, action research project in public setting.
Prerequisite: SW 622 and SW 624 and SW 625 and SW 681 and SW 682 and SW 685 and SW 688 and SW 689.
Corequisites: SW 642 and SW 650.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 688 Practicum III 3(3-0)
Fall.
Placement in approved practice setting under MSW supervision for at least 250 clock hours.
Prerequisite: None.
Corequisite: SW 622 and SW 625 and SW 641 and SW 681.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 689 Practicum IV 3(3-0)
Spring.
Placement in approved practice setting under MSW supervision for at least 250 clock hours.
Prerequisite: SW 622 and SW 625 and SW 681 and SW 688.
Corequisites: SW 624 and SW 682 and SW 685.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 691 Special Topics 3(3-0)
As Needed.
Graduate level of study designed to increase understanding in areas not covered by the core MSW courses.
Prerequisite: None
Corequisites: None.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

Social Work, Bachelor of Social Work

The Bachelor of Social Work (BSW) program at CSU Pueblo prepares students to excel in the field of social work. Our program was created for students looking to help individuals, families, groups, and communities across all racial, cultural, and economic demography. Our social work program has been continuously accredited by the Council on Social Work Education (CSWE) since 1982. CSWE is the premier organization for accreditation of social work programs. CSU Pueblo faculty and staff are dedicated towards providing a rich and interacting learning experience where our students get to work hands-on with a local agency that helps them collaborate with individuals, families, and communities in need. Our graduates are highly regarded by the social service community. They are sought after to fill social work staffing needs in the surrounding urban and rural communities in this region. Many graduates from this program are administrators and practitioners in social service agencies throughout Southern Colorado.

Mission Statement

"As part of Colorado State University-Pueblo, a regional comprehensive university, "As part of Colorado State University-Pueblo, a regional comprehensive university, the Department of Social Work at CSU Pueblo prepares BSW generalist practitioners to engage in a global society across diverse systems of all sizes, including individuals, families, groups, organizations, and communities with interventions grounded in scientific inquiry. Students will utilize an anti-racist, anti-oppressive perspective to enhance life and dignity for all people in a rapidly changing world."

Program Goals & Objectives

Goal 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.

Goal 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 American Indians.

Goal 3 – Develop the ability of BSW students to advocate for social economic justice with systems of all sizes.
Objectives:

- Students will identify factors which impact the attainment of social, environmental and economic justice for diverse systems.
- Students will select and apply appropriate intervention methods to develop and enhance social, environmental, and economic justice across diverse systems.

Goal 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.

Specific Admission Requirements

Admission into the Social Work Program

Students in the Social Work major are required to maintain a 2.5 GPA in all required social work courses. Admission into the upper division courses requires that students either have completed or be enrolled the previous semester for the following courses:

- Introduction to Sociology
- Introduction to Psychology
- A course in Human Biology
- A political science or economics course

Admission into the Social Work Placement Practicum

The Placement Practicum

Social work majors are required to apply for admission into the placement practicum. All social work courses except SW 492 and SW 499 must be completed prior to entering placement. Orientation meetings are scheduled by the Placement Coordinator each fall and spring semester for all students planning to enroll in the placement practicum during the following fall semester, and the orientations are mandatory for students wishing to enter placement. Information on application to placement and information on the admission process is provided at the orientation. Students unable to attend are required to meet with the Placement Coordinator to obtain the forms and receive pertinent information to proceed with the practicum placement process.

Applications must be completed before the time of your interview with the Placement Coordinator. The application will be reviewed and the student will be notified of acceptance into the placement practicum by the Placement Coordinator. Late submission of the application may delay both placement into the practicum and graduation since most placement 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 Placement 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 Placement Coordinator. Students unable to obtain acceptance into an approved placement after three attempts, or to 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 placement work in an approved community social service agency.

Student Learning Outcomes

Upon completion of the Baccalaureate Social Work Program, students will

- Demonstrate ethical and professional behavior;
- Advance human rights and social, racial, economic, and environmental justice;
- Engage anti-racism, diversity, equity, and inclusion (ADEI) in practice;
- Engage in practice-informed research and research-informed practice;
- Engage in policy practice;
- Engage with individuals, families, groups, organizations, and communities;
- Assess individuals, families, groups, organizations, and communities;
- Intervene with individuals, families, groups, organizations, and communities; and
- Evaluate practice 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 placement practicum consisting of 448 clock hours under the supervision of a task/placement supervisor and with a faculty liaison. An assessment of the placement experience completed by the placement supervisor is a direct measure. During the placement seminar, students will complete the Social Work Assessment test. The final evaluation of student placement will also be used to assess student learning. 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.

Specific Program Requirements

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: 34 credit hours

Specified courses: 21
Basic social work courses: 13

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.

Social work majors may not test out of any social work classes.

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.

Course	Title	Credits
The following specific courses are required as foundation for enrollment in upper division social work classes:		12
BIOL 100	Principles of Biology (GT-SC2)	3
PSYC 100	General Psychology (GT-SS3)	3
SOC 101	Introduction to Sociology (GT-SS3)	3
A course in ECON or POLS		3
The following courses may be taken concurrently with 300-level social work courses:		6
CS/SW 230	Chicano: Social & Psychological Study (GT-SS3)	3
or CS 101	Introduction to Chicano Studies (GT-HI1)	
Select one WS course		3
MATH 156	Introduction to Statistics (GT-MA1) (or an approved statistics course)	3
or SW 210	Statistics for Social Worker	
Total Credits		**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. 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.

Course	Title	Credits
SW 100	Introduction to Social Work	3
SW 201	Human Behavior and Social Environment I	3
SW 202	Human Behavior and Social Environment II	3
SW 205	Social Welfare in the United States (GT-SS1)	3

SW 225	Social Work Policies and Procedures	1
Total Credits		**13**

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.

Course	Title	Credits
SW 301	Professional Writing in Social Work	3
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	Placement Seminar I	3
SW 482	Placement Seminar II	3
SW 488	Placement I	5
SW 489	Placement II	5
SW 492	Research	3
SW 499	Research Lab (Research Lab)	1
Total Credits		**41**

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. Social work is exempt from obtaining a minor or 18 credits outside the major. Students may use elective courses to achieve the total credit hours required. Social work faculty advisers can assist in the selection of electives.

Specific Graduation Requirements

Must have 2.5 GPA in social work and social work other required courses.

Social Work, Masters of Social Work

The Department of Social Work offers a Master of Social Work (MSW), with a generalist perspective. The program received accreditation status with the Council on Social Work Education in February 2019. The program is designed to prepare students for advanced roles as practitioners to practice holistically in diverse and complex settings. Graduate programs are delivered in traditional classroom, hybrid, and online format. In order to register in graduate social work courses, students must be admitted to the Social Work program for the Generalist or Specialized/ Advanced years. The program adheres to a set of professional standards for academic and behavioral performance, including the NASW Code of Ethics. They are posted on our website.

Statement on Licensure

The MSW degree may lead to licensure as a Licensed Social Worker or a Licensed Clinical Social Worker in Colorado or other states. *Students are strongly encouraged to work with the academic department and the applicable professional licensure board in the state in which they intend to pursue licensing to ensure all licensure requirements will be satisfactorily met. (e.g. Division of Regulatory Agencies in Colorado)* For more information on specific state licensing requirements, please visit the Association of Social Work Boards website.

Mission

The Master's in Social Work at Colorado State University Pueblo is designed to meet the needs of diverse constituencies in southeastern Colorado. As an advanced generalist program the curriculum includes a strong focus on intervention at multiple levels, advanced policy analysis, and research skills. The mission of the MSW Program at Colorado State University Pueblo is to prepare competent advanced social work practitioners with the knowledge, skills, values, and cognitive and affective processes required to serve diverse client populations in systems of all sizes.

Program objectives emerge from the mission statement and coordinate with the Accreditation Standards required by the Council on Social Work Education. Our objectives are to:

1. Prepare advanced social work practitioners with the ethical consciousness, cultural competence, and desire to be lifelong learners who give back to the profession of social work and enhance the global community in which we live;

2. Provide students with the necessary advanced skills in engagement, assessment, intervention, and evaluation in order to competently serve diverse client populations at all levels of social work practice and across the lifespan utilizing the ecological perspective as a foundation; and

3. Prepare students to engage in policy practice, to advocate for social and economic justice, to serve diverse client systems of all sizes ethically and compassionately, and to engage in research in its many forms in order to better serve individuals, families, groups, organizations, and communities.

Specific Admission Requirements

The Master of Social Work students must be admitted to CSU Pueblo graduate studies program before applying to the Master of Social Work program. Students enrolled in the Master of Social Work curriculum must have prior acceptance into the social work program as Generalist or Specialist/Advanced Standing candidates. Applications are available on our website. For questions, please contact the Department Chair.

Generalist Year Admission Standards

- A bachelor's degree from a university accredited by a nationally recognized accrediting agency by the Department of Education, with at least 18 credits of liberal arts studies;
- A course in statistics;
- A research course;
- A GPA of 3.0 or higher on a 4.0 scale, or a 2.5-2.99 GPA on a 4.0 scale with a "B" grade or higher in all courses in the first semester of the Generalist program;
- Completion of the CSU Pueblo Admission Application as a Graduate student and payment of the $35 application fee.

Specialized Year Admission Standards

- A Bachelor of Social Work degree from a CSWE accredited program or recognized through its International Social Work Degree Recognition and Evaluation Services;
- A course in statistics;
- A research course;

- A GPA of 3.0 or higher on a 4.0 scale;
- 120 hours of volunteer or paid work experience in human services field (above and beyond field hours) in a 6-month period during the last 5 calendar years;
- Most recent field evaluation;
- In the 3 Letters of recommendation for CSI Pueblo, one must be from a professor, one from academic advisor, one from employer or field supervisor **(BSW students from CSU Pueblo may not use a current social work professor as a reference. You may substitute an additional educational reference in place of the academic advisor's recommendation)**;
- Completion of the CSU Pueblo Admission Application as a Graduate student and payment of the $35 application fee.

The MAT or GRE is not required for admission.

Student Learning Outcomes

At the completion of this program, graduates will be able to:

1. Demonstrate Ethical and Professional Behavior

2. Advance Human Rights and Social, Racial, Economic, and Environmental Justice

3. Engage Anti-Racism, Diversity, Equity, and Inclusion (ADEI) in Practice

4. Engage In Practice-informed Research and Research-informed Practice

5. Engage in Policy Practice

6. Engage with Individuals, Families, Groups, Organizations, and Communities

7. Assess Individuals, Families, Groups, Organizations, and Communities

8. Intervene with Individuals, Families, Groups, Organizations, and Communities

9. Evaluate Practice with Individuals, Families, Groups, Organizations, and Communities

Specific Program Requirements

Social Work (MSW) degrees can be obtained in one of two ways: straight admission from the accredited BSW to the 2nd year of the MSW, referred to as Advanced Standing, and a longer program that can be accessed by anyone with any undergraduate degree, referred to as Generalist year admission. The 2nd year Specialized courses cover an entire calendar year, if the student is full time. When the student is full time, Generalist courses cover a calendar year plus the Specialized calendar year.

Generalist - Year One

Course	Title	Credits
Fall		
SW 501	Holistic Human Behavior	3
SW 502	Introduction to Social Work & Ethics	3
SW 502L	Introduction to Social Work & Ethics Lab	1
SW 520	Diversity in the Human Experience	3
	Credits	**10**
Spring		
SW 522	Intervention with Individuals	3
SW 523	Intervention with Families & Groups	3
SW 581	Seminar I	1
SW 588	Practicum I	3
	Credits	**10**
Summer		
SW 524	Intervention with Agency-Community	3
SW 550	Social Welfare Policy & Practice	3
SW 582	Seminar II	1
SW 589	Practicum II	3
	Credits	**10**
	Total Credits	**30**

Specialist - Year Two or Advanced Standing

Course	Title	Credits
Fall		
SW 622	Assess/Intervene with Individuals	3
SW 625	Assess/Intervene with Child/Family	3
SW 681	Seminar III	1
SW 688	Practicum III	3
	Credits	**10**
Spring		
SW 624	Assess/Intervene Group/Agency/Community	3
SW 685	Research in Practice & Agencies	3
SW 682	Seminar IV	1
SW 689	Practicum IV	3
	Credits	**10**
Summer		
SW 642	Administration & Supervision	3
SW 650	Advanced Policy in a Diverse World	3
SW 687	Culminating Project	1
Social Work Elective		3
	Credits	**10**
	Total Credits	**30**

TOTAL CREDITS TO MSW DEGREE IN ADVANCED GENERALIST PRACTICE: 60 CREDITS

Sociology, Criminology, & Anthropology Department

Mission Statement

The Department of Sociology, Criminology, and Anthropology is committed to the principles of a liberal education. Our central objective is to teach and communicate the sociological and anthropological ways of viewing the world. The programs in sociology, criminology, anthropology, and women's studies offer curriculum designed to increase understanding of social organization and social relationships and to assist students in developing skills that can be applied to making a positive difference in their professional and personal lives. Each program in the department supports the long-standing interest of our disciplines in examining the human condition and understanding stability and change in social life. The department prepares students to work in a wide variety of occupations or to pursue professional or graduate studies. Our mission is to produce graduates who are motivated and equipped to make meaningful contributions to the enhancement of the human condition.

The department's mission relates to the mission of the College of Humanities, Arts, and Social Sciences in the following ways:

1. The department programs provide classroom environments and field experience opportunities that enhance social awareness, encourage

personal reflection, and assist students to further develop critical thinking and problem solving skills;

2. Social action and responsibility, personal morality and accountability, and professional ethics are focused on throughout the curriculum and in co-curricular activities that engage students with each other and in the community;
3. The disciplines within the department are committed to producing motivated and socially aware graduates equipped to make meaningful contributions within a diverse community and increasingly interdependent world.

Women's Studies

Mission

The Women's Studies offers students a different perspective for understanding their disciplines, themselves, and others. Drawing from the rich history of feminist theory and gender studies, this perspective examines intersectionality and incorporates issues of gender identity, race, ethnicity, class, sexuality, and other dimensions of human diversity to examine contemporary social issues, culture, communication, the media and arts, education, civic engagement, social activism, inequities and social justice, and the global contributions of women, past to present.

Academic Programs

Criminology

Undergraduate Programs

- Criminology, Bachelor of Arts (p. 373)
- Criminology, Bachelor of Science (p. 374)
- Criminology: Community Engagement Concentration, Bachelor of Science (p. 378)

Sociology

Undergraduate Programs

- Sociology, Bachelor of Arts (p. 379)
- Sociology, Bachelor of Science (p. 380)
- Sociology: Community Engagement Concentration, Bachelor of Arts (p. 382)
- Sociology: Community Engagement Concentration, Bachelor of Science (p. 383)

Minors

- Sociology, Minor (p. 381)

Double Major

Undergraduate Programs

- Criminology/Sociology Double Major, Bachelor of Arts (p. 375)
- Criminology/Sociology Double Major, Bachelor of Science (p. 376)

Anthropology

Minors

- Anthropology, Minor (p. 372)

Women Studies

Minors

- Women's Studies, Minor (p. 384)

Anthropology (ANTH)

ANTH 100 Cultural Anthropology (GT-SS3) 3(3-0)
Fall, Spring, Summer.
Introduction to the concepts by which anthropology understands particular lifestyles, and to the constructs by which it accounts for similarities and differences among lifestyles.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS3) (CC)

ANTH 101 Biological Anthropology 3(3-0)
Fall, Spring.
The course examines humans as biological organisms from an evolutionary perspective. Other primates and the significance of genetic diversity in modern human populations are discussed.
Prerequisite: None.
Corequisite: ANTH 101L.
Registration Information: None.
(Gen Ed: ST)

ANTH 101L Biological Anthropology Lab 1(0-2)
Fall, Spring.
The lab will reinforce and extend student understanding of biological anthropological concepts.
Prerequisite: None.
Corequisite: ANTH 101.
Registration Information: None.
(Gen Ed: ST)

ANTH 103 Introduction to Archaeology 3(3-0)
Fall.
This course introduces students to the field of archaeology. Examines how archaeologists acquire and interpret archaeological evidence. Reviews accepted practice and archaeological ethics and law.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

ANTH 105 (DS 105, PSYC 105, SOC 105, WS 105) Understanding Human Diversity 3(3-0)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ANTH 106 (ENG 106) Language, Thought and Culture 3(3-0)
As Needed.
Cross-cultural introduction to language processes in human society.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: SS) (CC)

ANTH 212 (CRIM 212) The Forensics of Bones 3(3-0)
As Needed.
An examination of the basic procedures used by forensic anthropologists to obtain evidence in criminal investigations.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ANTH 291 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: May not repeat the same topic. Repeatable (6).

ANTH 314 (SOC 314) Religion, Culture and Society 3(3-0)
As Needed.
Cross-cultural concepts and practices of the supernatural are studied. A holistic analysis to the role of religion in cultures and society.
Prerequisite: ANTH 100 or SOC 101.
Corequisite: None.
Registration Information: None.

ANTH 315 (SOC 315) Health, Culture, and Society 3(3-0)
Fall, Spring, Summer.
Cross-cultural concepts and approaches to health are studied. A holistic analysis of medicine as a cultural system as opposed to a biological one.
Prerequisite: ANTH 100 or SOC 101.
Corequisite: None.
Registration Information: None.

ANTH 316 (SOC 316) Age, Culture and Society 3(3-0)
As Needed.
Cross-cultural concepts and approaches to age are studied. A holistic analysis of the life course focusing on societal and cultural perceptions.
Prerequisite: ANTH 100 or SOC 101.
Corequisite: None.
Registration Information: None.

ANTH 317 Anthropology of Food 3(3-0)
As Needed.
This class will critically assess the multiple relationships between food, culture, and processes of globalization.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ANTH 318 Archaeology of Beer & Wine 3(3-0)
As Needed.
An examination of the archaeological evidence for the development and production of beer and wine in ancient cultures, and its various cultural contexts.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ANTH 321 (CRIM 321, SOC 321) Cross-Cultural Perspective on Crime 3(3-0)
As Needed.
An examination of crime in non-western societies with a comparison to crime and punishment in modern American society.
Prerequisite: ANTH 100 or CRIM 101 or SOC 101.
Corequisite: None.
Registration Information: None.

ANTH 340 Museum Conservation 3(3-0)
As Needed.
Introduction to museum conservation and collections care. Students become familiar with many common materials found in museum collections, their care and management, and the ethical responsibilities of museum personnel.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

ANTH 357 (CRIM 357, SOC 357) Immigration 3(3-0)
As Needed.
Examines migration processes, with a particular focus on immigration to the United States. Migration patterns are analyzed considering social, political, and historical context, including structural global patterns.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ANTH 491 Special Topics 1-3(1-3-1-3)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: May not repeat the same topic. Repeatable (6).

ANTH 492 Research (1-3 V)
As Needed.
Directed study for students interested in gaining research experience in anthropology.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing and permission of instructor. Repeatable (3).

ANTH 494 Field Experience (1-12 V)
As Needed.
Practical experience in an agency setting.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing and permission of instructor. Repeatable (12).

ANTH 495 Independent Study (1-3 V)
As Needed.
Directed study for students interested in specific areas of anthropological concern.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

Criminology (CRIM)

CRIM 101 Introduction to Criminology 3(3-0)
Fall, Spring.
This class will address the historical, theoretical and methodological foundations for understanding crime and criminology; various types of crime, & responses to crime by police, the courts and correctional institutions.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 203 (SOC 203) The Criminal Justice System 3(3-0)
Spring.
Critical study of the U.S. criminal justice system, its historical, social & institutional context, & its structure & functioning. Influence of law, process & social justice on police, court, corrections, & victim services.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

CRIM 205 (SOC 205) Research Methods 3(3-0)
Fall, Spring.
Introduces methods of research and investigation in sociology, criminology, and the social sciences.
Prerequisite: CRIM 101 or SOC 101.
Corequisites: None.
Registration Information: None.

CRIM 212 (ANTH 212) The Forensics of Bones 3(3-0)
As Needed.
An examination of the basic procedures used by forensic anthropologists to obtain evidence in criminal investigations.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

CRIM 252 (SOC 252) Understanding Lived Experiences 3(3-0)
As Needed.
Explores lived experiences using a sociological lens. Students learn to understand their own & others' lives in new ways through applying concepts such as social norms, stigma, social control, privilege & intersectionality.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

CRIM 261 (SOC 261) Introduction to Cannabis Studies 3(3-0)
Fall.
Introduces students to the social scientific study of cannabis and its complicated relationship to society. Emphasis on sociological and criminological topics including changes in the legal and popular perception of cannabis.
Prerequisite: None.
Corequisites: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

CRIM 275 Law & Procedure for Peace Officers 3(3-0)
As Needed.
Content on diversity, law, policy, communication, and police procedures. Course is reserved for Peace Officers completing the Police Academy. Credit is awarded concurrently in Criminology, Political Science, and Social Work.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 291 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

CRIM 303 (SOC 303) Deviance 3(3-0)
As Needed.
Patterns & causes associated with behavior, conditions, beliefs, & other social characteristics defined &/or treated as socially deviant, including but not limited to political, sexual, cultural, & organizational deviance.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

CRIM 304 (SOC 304) Race and Crime 3(3-0)
As Needed.
Explores historical and contemporary intersecting issues of race and crime in the United States. Theoretical grounding and factual information provide the foundation for the course.
Prerequisite: CRIM 101 or CRIM 203 or SOC 101 or SOC 203.
Corequisites: None.
Registration Information: None.

CRIM 305 (SOC 305, WS 305) Women & Crime 3(3-0)
As Needed.
A critical examination of the historical and contemporary intersecting issues of sex, gender, and crime, focusing on girls' and women's experiences as victims, offenders, and workers in the criminal justice system.
Prerequisite: ANTH 100 or CRIM 101 or SOC 101 or WS 100.
Corequisites: None.
Registration Information: None.

CRIM 306 (SOC 306) Delinquency and Juvenile Justice 3(3-0)
Fall.
Theoretical and historical study of delinquency, intersectionality, and social justice. Family, peer, school, community, and cultural contexts and juvenile law, courts, policing, and youth corrections are examined.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 310 Criminological Theory 3(3-0)
Fall, Spring.
Examination of major theoretical explanations of crime and their policy implications.
Prerequisite: CRIM 101.
Corequisite: None.
Registration Information: None.

CRIM 321 (ANTH 321, SOC 321) Cross-Cultural Perspective on Crime 3(3-0)
As Needed.
An examination of crime in non-western societies with a comparison to crime and punishment in modern American society.
Prerequisite: ANTH 100 or CRIM 101 or SOC 101.
Corequisites: None.
Registration Information: None.

CRIM 335 (SOC 335) Advanced Research Methods 3(3-0)
As Needed.
Advanced course in qualitative & quantitative social science research methods. Focus on critical examination of the logic underlying social inquiry, the ethics of social research, & developing practical skills.
Prerequisites: CRIM 205 or SOC 205.
Corequisites: None.
Registration Information: None.

CRIM 353 Penology 3(3-0)
As Needed.
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: CRIM 101 or CRIM 203 or SOC 101 or SOC 203.
Corequisite: None.
Registration Information: None.

CRIM 357 (ANTH 357, SOC 357) Immigration 3(3-0)
As Needed.
Examines migration processes, with a particular focus on immigration to the United States. Migration patterns are analyzed considering social, political, and historical context, including structural global patterns.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

CRIM 361 (SOC 361) Advanced Cannabis Studies 3(3-0)
Spring.
In-depth exploration of prominent cannabis studies topics. Students will complete projects featuring cannabis research, business, political action/social justice, and creative works.
Prerequisite: CRIM 261 or SOC 261.
Corequisites: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

CRIM 374 (SOC 374) Crime in Film 3(3-0)
Spring.
Employ theoretical perspectives to better understand motivations of Hollywood criminals and the peculiar aspects of a society with an insatiable appetite for crime as "entertainment".
Prerequisite: None.
Corequisites: None.
Registration Information: None.

CRIM 376 Crime & Society in Science Fiction 3(3-0)
Summer.
This course focuses on sociological understandings of crime and other social phenomena. Through science fiction literature, movies, and TV, the class explores how current social realities are reflected in science fiction.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 401 Crime, Law, & Justice Studies 3(3-0)
As Needed.
Study of contemporary issues in criminology, law, & justice. Topics may vary from semester to semester. The class may be repeated for a maximum of 6 credits, but no single topic may be repeated. Example: human trafficking.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing. Repeatable (6).

CRIM 405 (SOC 405) Law & Society 3(3-0)
Spring.
The origins and functions of law; the social organization of legal institutions and decisions; the relationship of law to morality, justice and social change.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 407 (WS 407) Family Violence 3(3-0)
As Needed.
The extent, seriousness, and impact of major forms of family violence, including child maltreatment, dating and partner violence, stalking, and mistreatment of elders. Gender, race and social class implications are examined.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 409 Victimology (3 V)
Spring.
Study of victims with a focus on victims of officially defined crime. Examination of social changes impacting cultural views and the societal response to victims as well as the costs and consequences of victimization.
Prerequisite: CRIM 101 or CRIM 203 or SOC 101 or SOC 203.
Corequisite: None.
Registration Information: None.

CRIM 410 Structural & Elite Crime 3(3-0)
Fall.
Examination of crimes and social injuries perpetrated by organizational structures that do physical or economic harm to the environment, their employees, and their customers.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 411 Police and Society 3(3-0)
As Needed.
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: CRIM 101 or CRIM 203 or SOC 101 or SOC 203.
Corequisite: None.
Registration Information: None.

CRIM 413 Patterns of Homicide 3(3-0)
As Needed.
Examines the rates, types, patterns, and explanation of homicide in the United States and selected other countries.
Prerequisite: CRIM 101 or CRIM 203 or SOC 203.
Corequisite: None.
Registration Information: None.

CRIM 415 Forensic Criminology 3(3-0)
As Needed.
This course introduces students to the application of science to the justice system. It provides beginning levels and fundamental background in forensic criminology as well as criminal investigation.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 418 (SOC 418) Crime, Drugs, & Social Policy 3(3-0)
As Needed.
This course examines the ways in which crime and drug policy is formulated, articulated, implemented, and evaluated.
Prerequisite: CRIM 101 or CRIM 203 or SOC 101 or SOC 203.
Corequisite: None.
Registration Information: None.

CRIM 422 Terrorism and Mass Murder 3(3-0)
As Needed.
Examines mass murder, genocide, and terrorism around the world and assesses current control initiatives.
Prerequisite: CRIM 101 or SOC 101.
Corequisite: None.
Registration Information: None.

CRIM 425 Gangs in Contemporary America 3(3-0)
As Needed.
Trends, organizational characteristics, processes, and causative factors associated with gangs in contemporary American society.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 426 (SOC 426) Collective Violence and Rioting 3(3-0)
Summer.
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: CRIM 101 or SOC 101.
Corequisite: None.
Registration Information: None.

CRIM 455 (WS 455) Hate Crimes 3(3-0)
As Needed.
Examines assumptions about race, ethnicity, gender, sexuality, religion, nationality & other factors that are used to justify the bias behind hate crimes; examines social/legal definitions, causal factors & consequences.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 491 Special Topics 1-3(1-3-0)
As Needed.
Special topics in criminology.
Prerequisites: None.
Corequisites: None.
Registration Information: May not repeat the same topic. Repeatable (18).

CRIM 492 Research (1-3 V)
As Needed.
Directed study for students interested in gaining research experience in criminology.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of Instructor. Repeatable (12).

CRIM 494 Field Experience (1-12 V)
As Needed.
Practical on-the-job experience in an agency setting.
Prerequisite: None.
Corequisite: None.
Registration Information: Criminology major. Junior standing. Permission of instructor. Repeatable (12).

CRIM 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Criminology major or minor. Permission of instructor. Repeatable (9).

Sociology (SOC)

SOC 101 Introduction to Sociology (GT-SS3) 3(3-0)
Fall, Spring, Summer.
The scientific study of patterns and processes of human social relations.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS3)

SOC 105 (ANTH 105, DS 105, PSYC 105, WS 105) Understanding Human Diversity 3(3-0)
As Needed.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 201 Social Problems (GT-SS1) 3(3-0)
Fall.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS1)

SOC 203 (CRIM 203) The Criminal Justice System 3(3-0)
Spring.
Critical study of the U.S. criminal justice system, its historical, social & institutional context, & its structure & functioning. Influence of law, process & social justice on police, court, corrections, & victim services.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 205 (CRIM 205) Research Methods 3(3-0)
Fall, Spring.
Introduces methods of research and investigation in sociology, criminology, and the social sciences.
Prerequisite: CRIM 101 or SOC 101.
Corequisites: None.
Registration Information: None.

SOC 231 (PSYC 231) Marriage & Family Relationships 3(3-0)
Fall, Spring.
Marriage and family from an institutional and relationship perspective: cross-cultural diversity, mate selection, marital dynamics, parenting, divorce, remarriage, emerging patterns.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS)

SOC 248 Environmental Sociology 3(3-0)
As Needed.
We will use our sociological imaginations to explore the often puzzling relationships that humans all over the globe have developed with their environment.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 252 (CRIM 252) Understanding Lived Experiences 3(3-0)
As Needed.
Explores lived experiences using a sociological lens. Students learn to understand their own & others' lives in new ways through applying concepts such as social norms, stigma, social control, privilege & intersectionality.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 261 (CRIM 261) Introduction to Cannabis Studies 3(3-0)
Fall.
Introduces students to the social scientific study of cannabis and its complicated relationship to society. Emphasis on sociological and criminological topics including changes in the legal and popular perception of cannabis.
Prerequisite: None.
Corequisites: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

SOC 291 Special Topics (1-3 V)
As Needed.
Special topics in Sociology.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

SOC 302 Collective Behavior and Social Movements 3(3-0)
Spring.
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.
Corequisites: None.
Registration Information: None.

SOC 303 (CRIM 303) Deviance 3(3-0)
As Needed.
Patterns & causes associated with behavior, conditions, beliefs, & other social characteristics defined &/or treated as socially deviant, including but not limited to political, sexual, cultural, & organizational deviance.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 304 (CRIM 304) Race and Crime 3(3-0)
As Needed.
Explores historical and contemporary intersecting issues of race and crime in the United States. Theoretical grounding and factual information provide the foundation for the course.
Prerequisite: CRIM 101 or CRIM 203 or SOC 101 or SOC 203.
Corequisites: None.
Registration Information: None.

SOC 305 (CRIM 305, WS 305) Women & Crime 3(3-0)
As Needed.
A critical examination of the historical and contemporary intersecting issues of sex, gender, and crime, focusing on girls' and women's experiences as victims, offenders, and workers in the criminal justice system.
Prerequisite: ANTH 100 or CRIM 101 or SOC 101 or WS 100.
Corequisites: None.
Registration Information: None.

SOC 306 (CRIM 306) Delinquency and Juvenile Justice 3(3-0)
Fall.
Theoretical and historical study of delinquency, intersectionality, and social justice. Family, peer, school, community, and cultural contexts and juvenile law, courts, policing, and youth corrections are examined.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 310 Social & Cultural Theory 3(3-0)
Fall.
Classical to contemporary sociological theories are studied. A primary objective is to link sociological theory with what we experience in the social world and thus, to fuse theorizing with greater understanding of society.
Prerequisite: SOC 101.
Corequisites: None.
Registration Information: None.

SOC 312 Soc on the Fringe Cults & Conspiracy Theories 3(3-0)
As Needed.
This course will introduce students to core sociological theoretical frameworks as they relate to conspiracy “theories” and alternative new religions known as cults.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

SOC 314 (ANTH 314) Religion, Culture and Society 3(3-0)
As Needed.
Cross-cultural concepts and practices of the supernatural are studied. A holistic analysis to the role of religion in cultures and society.
Prerequisite: ANTH 100 or SOC 101.
Corequisites: None.
Registration Information: None.

SOC 315 (ANTH 315) Health, Culture, and Society 3(3-0)
Fall, Spring, Summer.
Cross-cultural concepts and approaches to health are studied. A holistic analysis of medicine as a cultural system as opposed to a biological one.
Prerequisite: ANTH 100 or SOC 101.
Corequisites: None.
Registration Information: None.

SOC 316 (ANTH 316) Age, Culture and Society 3(3-0)
As Needed.
Cross-cultural concepts and approaches to age are studied. A holistic analysis of the life course focusing on societal and cultural perceptions.
Prerequisite: ANTH 100 or SOC 101.
Corequisites: None.
Registration Information: None.

SOC 321 (ANTH 321, CRIM 321) Cross-Cultural Perspective on Crime 3(3-0)
As Needed.
An examination of crime in non-western societies with a comparison to crime and punishment in modern American society.
Prerequisite: ANTH 100 or CRIM 101 or SOC 101.
Corequisites: None.
Registration Information: None.

SOC 324 Race & Ethnic Relation 3(3-0)
Fall.
Social, political and historical conditions under which segregation, racial/ethnic hierarchies and r/e conflict emerge, and the institutions through which boundaries and hierarchies are produced and reproduced in the U.S.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 325 (WS 325) Gender And Society 3(3-0)
Summer.
Analysis of how gender as a social construct influences institutions, interaction & lived experience in a diverse society. The intersection of race, ethnicity, class & sexualities is viewed through the lens of gender & culture.
Prerequisite: SOC 101 or WS 100.
Corequisites: None.
Registration Information: None.

SOC 326 Social Stratification 3(3-0)
Summer.
Inquire into inequalities of wealth, power, and the consequence for individuals and society.
Prerequisite: SOC 101 or SOC 201.
Corequisites: None.
Registration Information: None.

SOC 334 Sociology of the Military 3(3-0)
As Needed.
This course will examine the institution of the military and the intersection of the military and society.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

SOC 335 (CRIM 335) Advanced Research Methods 3(3-0)
As Needed.
Advanced course in qualitative & quantitative social science research methods. Focus on critical examination of the logic underlying social inquiry, the ethics of social research, & developing practical skills.
Prerequisites: CRIM 205 or SOC 205.
Corequisites: None.
Registration Information: None.

SOC 352 (PSYC 352) Social Psychology 3(3-0)
Fall, Spring.
General and applied psychological principles of the individual's interaction with a group.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

SOC 357 (ANTH 357, CRIM 357) Immigration 3(3-0)
As Needed.
Examines migration processes, with a particular focus on immigration to the United States. Migration patterns are analyzed considering social, political, and historical context, including structural global patterns.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 361 (CRIM 361) Advanced Cannabis Studies 3(3-0)
Spring.
In-depth exploration of prominent cannabis studies topics. Students will complete projects featuring cannabis research, business, political action/social justice, and creative works.
Prerequisite: CRIM 261 or SOC 261.
Corequisites: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

SOC 370 Popular Culture 3(3-0)
As Needed.
Critical examination of the social implications of contemporary popular culture & its influence in our everyday lives. Explores how popular culture reflects & shapes key institutions, social behavior, & individual identities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

SOC 373 Film & Society 3(3-0)
As Needed.
Analysis of film as a major contemporary cultural form that reflects, influences & shapes social values, beliefs & behaviors. Examines representations of race, class, gender & various social issues using a sociological lens.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

SOC 374 (CRIM 374) Crime in Film 3(3-0)
Spring.
Employ theoretical perspectives to better understand motivations of Hollywood criminals and the peculiar aspects of a society with an insatiable appetite for crime as "entertainment".
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 376 Crime & Society in Science Fiction 3(3-0)
Summer.
This course focuses on sociological understandings of crime and other social phenomena. Through science fiction literature, movies, and TV, the class explores how current social realities are reflected in science fiction.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 378 Rock 'n' Roll and Rebellion 3(3-0)
Fall.
The course provides a social historical analysis of the development and impact of an important form of contemporary popular culture - rock 'n' roll music.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 388 Community Engagement 3(3-0)
As Needed.
Explores how one's lived experiences can connect to wider social forces to positively impact the public domain. Students acquire the tools needed to carry their education into the workforce and towards civic engagement.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

SOC 388L Community Engagement Lab 1(0-2)
As Needed.
Students will work closely with their professor to research, address, and advocate for more awareness of a social issue by developing a community or university project that most closely aligns with student interests.
Prerequisite: None.
Corequisite: None.
Registration Information: It's strongly recommended that this course be taken with SOC 388.

SOC 404 Poverty and Inequality in the U.S. 3(3-0)
Spring.
Critical examination of sources and consequences of inequality and poverty, with primary focus on the United States. Anti-poverty programs explored.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 405 (CRIM 405) Law & Society 3(3-0)
Spring.
The origins and functions of law; the social organization of legal institutions and decisions; the relationship of law to morality, justice and social change.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 408 Science, Technology, and The Future 3(3-0)
Spring.
Social and structural implications of science and technology as they affect society.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 418 (CRIM 418) Crime, Drugs, & Social Policy 3(3-0)
As Needed.
This course examines the ways in which crime and drug policy is formulated, articulated, implemented, and evaluated.
Prerequisite: CRIM 101 or CRIM 203 or SOC 101 or SOC 203.
Corequisite: None.
Registration Information: None.

SOC 426 (CRIM 426) Collective Violence and Rioting 3(3-0)
Summer.
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: CRIM 101 or SOC 101.
Corequisites: None.
Registration Information: None.

SOC 428 (HIST 428, WS 428) Women & Work 3(3-0)
As Needed.
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: None.
Corequisites: None.
Registration Information: Junior or senior standing. Permission of instructor.

SOC 432 Organization Theory 3(3-0)
As Needed.
Critical examination of theories of organizational structure, process, and change. Explores origins and functions of formal organizations in human society.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 435 The Interviewer's Craft 3(3-0)
As Needed.
Introduces the variety of qualitative methods used in the social sciences for conducting research studies, gathering data and interpreting and analyzing research findings with a focus on interviewing techniques.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 450 Soc of Mental Health and Suicide 3(3-0)
As Needed.
Examines the social conditions that influence mental health and suicide in the United States and the psychosocial processes that link social experiences to psychological health.
Prerequisite: PSYC 352 or SOC 101 or SOC 352.
Corequisites: None.
Registration Information: None.

SOC 452 (PSYC 452) The Individual & Society 3(3-0)
As Needed.
How does our society shape the way we define ourselves and others? This class explores the relationship between the individual and society, and how that relationship affects the choices we make and the actions we take.
Prerequisites: PSYC 100 or PSYC 352 or SOC 101 or SOC 352.
Corequisites: None.
Registration Information: None.

SOC 490 Special Projects (1-3 V)
As Needed.
Allows one or more students to conceptualize, create, and complete a project relating to sociology, under supervision of faculty member(s).
Prerequisite: None.
Corequisites: None.
Registration Information: Sociology major. Junior standing. Permission of instructor. Repeatable (99).

SOC 491 Special Topics 1-3(1-3-0)
As Needed.
Special topics in sociology.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (18).

SOC 492 Research (1-3 V)
As Needed.
Directed study for students interested in gaining research experience in sociology.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (12).

SOC 494 Field Experience (1-12 V)
As Needed.
Practical on-the-job experience in an agency setting.
Prerequisite: None.
Corequisites: None.
Registration Information: Sociology major. Junior standing. Permission of instructor. Repeatable (12).

SOC 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisites: None.
Registration Information: Sociology major or minor. Permission of instructor. Repeatable (9).

SOC 498 Internship 3(0-9)
As Needed.
Provides students the opportunity to engage in an off-campus work experience related to their career interests. Students will learn how to apply the academic principles acquired through the classroom to a work situation.
Prerequisite: SOC 388 and SOC 388L.
Corequisite: None.
Registration Information: Students must be declared sociology or criminology major with community engagement core; or permission of the instructor.

Womens Studies (WS)

WS 100 Introduction to Women's Studies 3(3-0)
Fall, Spring, Summer.
An interdisciplinary course examining women's lives and roles through socio-economic, political, historical and biological perspectives. Introduces feminist theories and gender as a structure and process.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS) (CC)

WS 105 (ANTH 105, DS 105, PSYC 105, SOC 105) Understanding Human Diversity 3(3-0)
As Needed.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 211 (MAE 211) Women & Media 3(3-0)
Fall.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 212 (PSYC 212) Psychology of Diversity 3(3-0)
Fall.
To raise awareness of social inequities, promote cultural competency & appreciation of differences.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 217 (MAE 217, PSYC 217) Women & Society 3(3-0)
As Needed.
Statistical overview of the current status of women, followed by examination of theories concerning equality of the sexes.
Prerequisite: PSYC 100.
Corequisite: None.
Registration Information: None.

WS 230 (NSG 230) Women, Health, & Society 3(3-0)
As Needed.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 241 (ENG 241) Women in Literature 3(3-0)
As Needed.
Intensive study of literature written by women, in historical, cultural, and critical contexts.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisites: None.
Registration Information: None.

WS 291 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

WS 301 Theories of Intersectionality 3(3-0)
Spring.
Examination of gender, sexuality, race, class, and other variables connecting theory to activism. Exploration of how multiple identities intersect to create a whole.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 305 (CRIM 305, SOC 305) Women & Crime 3(3-0)
As Needed.
A critical examination of the historical and contemporary intersecting issues of sex, gender, and crime, focusing on girls' and women's experiences as victims, offenders, and workers in the criminal justice system.
Prerequisite: ANTH 100 or CRIM 101 or SOC 101 or WS 100.
Corequisites: None.
Registration Information: None.

WS 306 (CS 306) La Chicana 3(3-0)
Fall, Spring.
A social cultural and historical overview of the Chicana experience and contributions.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 308 Global Feminisms 3(3-0)
As Needed.
Examination of global dimensions of women's organizing and policymaking, drawing on both historical and contemporary examples. Exploration of global debates regarding contemporary feminist theory, practice, and activism.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 311 Gender & Film 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: None.

WS 325 (SOC 325) Gender And Society 3(3-0)
Summer.
Analysis of how gender as a social construct influences institutions, interaction & lived experience in a diverse society. The intersection of race, ethnicity, class & sexualities is viewed through the lens of gender & culture.
Prerequisite: SOC 101 or WS 100.
Corequisites: None.
Registration Information: None.

WS 335 (CID 335) Gender & Communication 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: None.

WS 341 (CS 341) Chicana Writers 3(3-0)
As Needed.
Survey of Chicana writers from the early 1900s to the present. Along with the literature, aspects of history, sociology and politics will be incorporated.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WS 401 (CS 401) Third World Feminisms 3(3-0)
As Needed.
This course focuses on Third World women's challenging views of global feminism and feminist representations of other women.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 407 (CRIM 407) Family Violence 3(3-0)
As Needed.
The extent, seriousness, and impact of major forms of family violence, including child maltreatment, dating and partner violence, stalking, and mistreatment of elders. Gender, race and social class implications are examined.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 428 (HIST 428, SOC 428) Women & Work 3(3-0)
As Needed.
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: None.
Corequisites: None.
Registration Information: Junior or senior standing. Permission of instructor.

WS 455 (CRIM 455) Hate Crimes 3(3-0)
As Needed.
Examines assumptions about race, ethnicity, gender, sexuality, religion, nationality & other factors that are used to justify the bias behind hate crimes; examines social/legal definitions, causal factors & consequences.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 485 Capstone 3(3-0)
As Needed.
Students develop and execute a research project related to gender, sexuality, and intersectionality.
Prerequisite: None.
Corequisites: None.
Registration Information: Senior standing. Permission of the instructor.

WS 490 Special Projects (1-3 V)
As Needed.
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 the WS program coordinator.
Prerequisite: None.
Corequisites: None.
Registration Information: Women's Studies minor. Junior standing. Permission of instructor. Repeatable (6).

WS 491 Special Topics (1-3 V)
As Needed.
Special topics in Women's Studies.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of the instructor. Repeatable (99).

WS 492 Research (1-3 V)
As Needed.
Research project selected by student and supervised by a faculty member.
Prerequisite: None.
Corequisites: None.
Registration Information: Women's Studies minor. Junior standing. Permission of instructor. Repeatable (6).

WS 494 Field Experience (2-6 V)
As Needed.
Application of the WS disciplinary framework to an off-campus volunteer work experience, under the supervision of a faculty member approved by WS.
Prerequisite: None.
Corequisites: None.
Registration Information: Women's Studies minor. Junior standing. Permission of instructor. Repeatable (6).

WS 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (3).

WS 498 Internship (2-6 V)
As Needed.
Application of the WS disciplinary framework to a work experience, under the direction of the selected site and a faulty member approved by WS.
Prerequisite: None.
Corequisites: None.
Registration Information: Women's Studies minor. Junior standing. Permission of instructor. Repeatable (6).

Anthropology, Minor

Anthropology is the study of human societies and cultures across space and time. The Anthropology minor provides students with an informed understanding of the diversity evident in human societies and the concepts by which anthropologists explain these dynamics. The program emphasizes a holistic approach to exploring key questions about human diversity in the past, present, and future and enhances student understanding through examining the numerous links between the systems of biology and culture. The program prepares students to understand anthropological methods and theories and to apply them to life experiences.

Program Mission

The Anthropology program complements the mission of the Department and the College by focusing on the analysis of the relationship among world cultures, societies, and the features and consequences of human evolution. The mission of the Anthropology minor is to provide a comprehensive and rigorous course of study for students seeking to understand the human cultural and biological experience, as well as to prepare students interested in pursuing graduate work in anthropology or professional degrees in related fields such as, sociology, psychology, criminology, history, museum studies, world languages, communication, education, and medicine.

Students pursuing the Anthropology minor will have the opportunity to experience anthropology's dominant sub disciplines: biological anthropology, cultural anthropology, archaeology and linguistics. Study in one or more of the four introductory level courses provides a solid grounding in the anthropological perspective, while upper level coursework emphasizes more in-depth exploration of a range of topics within the sub disciplines based on historical and theoretical foundations. Upper level electives also provide opportunities for independent study and directed research, which allow students the ability to chart their own course within the minor according to their academic interests.

Anthropology, by nature, is comparative and integrative. Through engaging in the variety of courses concerning human evolution, world prehistory, cultural and biological diversity of contemporary humans, students will learn to question and examine the significance of ethnocentric beliefs, attitudes, and prejudices and to understand the biological and cultural diversity that characterizes the human species. The program also provides students with the necessary intellectual tools of critical reasoning, and oral and written communication skills, designed to prepare them for life and work in our multi-cultural world.

Program Goals & Objectives

- Provide students with background in the concepts and bodies of knowledge used and produced by anthropologists so students will learn the basic core concepts of anthropology and be able to cite factual evidence to support their arguments on major topics under debate in the discipline.
- Provide students with training on the application of anthropological theory and method, enabling students to demonstrate knowledge of history and contemporary trends in anthropological theory, and the ability to apply theoretical approaches to concrete problems.
- Prepare students to apply anthropological concepts to real world problems and effectively communicate results and to increase students' abilities to think and write critically about anthropological concepts.

Student Learning Outcomes

Upon completion of the Anthropology minor, the student should achieve the following:

- An understanding and appreciation of human biological, archaeological, linguistic, and cultural diversity.
- An understanding of the three main anthropological approaches to the study of humanity: cross-cultural comparison, holism, and evolutionary theory, and the uses of each.
- An ability to understand, describe, and critically assess anthropological/archaeological theories, principles, concepts, and research methods.
- An ability to understand, describe, and critically assess the role of culture and social structures in shaping society and individual lives.
- An ability to critically write and verbally present ideas, critiques, and research within the discipline.

Outcomes Assessment Activities

Assessment of the Anthropology minor is the responsibility of the program faculty.

Anthropology minors' performance on each of the program's student learning outcomes will be assessed annually. Assessment results will be used to identify program strengths and to discern areas needing

improvement to enhance student performance in relation to the student learning outcomes.

Specific Program Requirements

Course	Title	Credits
ANTH 100	Cultural Anthropology (GT-SS3)	3
ANTH 101 & 101L	Biological Anthropology and Biological Anthropology Lab	4
Select one of the following:		3
ANTH 103	Introduction to Archaeology	3
ANTH 106	Language, Thought and Culture	3
Electives	Must be ANTH courses.	9
Total Credits		**19**

Additional Requirements

- No grades below C are accepted toward the minor.
- Course Substitutions must be approved by the Department Chair or the Anthropology Program Coordinator.

Criminology, Bachelor of Arts

Criminology examines the making of laws, the nature and extent of crime and criminality, and efforts to control crime. The criminology program provides students with a strong foundation in sociological theory and research to foster a comprehensive and contextual understanding of crime and justice in society and the capacity to think critically and creatively about what does and doesn't work in current crime control efforts. The organizations and institutions developed to respond to crime, including all the sub-components of the criminal justice system, will be examined along with the related concepts of law and justice. Courses focus on the social construction or definitions of crime, the causes of crime and delinquency, and on the origin, nature, and consequences of societal reactions to criminal offending, including practices in both public and private justice agencies. Students pursuing careers in traditional criminal justice fields, such as policing, probation & parole, corrections and reintegration, will develop a strong foundation to work and effect social change in these fields. Criminology majors interested in careers in legal advocacy, victim assistance, community activism and social research will develop the skills and knowledge enabling them to become transformational leaders in their profession.

The criminology curriculum emphasizes the importance of research-based knowledge, theoretically informed practice, critical analysis and ethical decision-making. Students are strongly encouraged to engage in experiential learning through courses, including our field experience class with placements in criminal justice, juvenile justice, victim services, and community-based agencies.

The criminology major prepares students for careers in the adult and juvenile justice systems – including law enforcement and criminal investigation, the courts, probation and parole, corrections, non-profit community based agencies, and victim services – or for graduate and professional programs in criminology, criminal justice, sociology, law, or legal and justice studies.

A criminology major leads to either a Bachelor of Arts (BA) or a Bachelor of Science (BS) degree.

For a BA degree, criminology majors must complete all the major degree requirements. In addition, students must complete the world language requirement as specified in the Academic Policies section of the University Catalog. This requirement includes completion of the second level of a world language or completion of WL 100 Intro to Comparative Linguistics (3 c.h.) and ANTH 106 Language, Thought and Culture (3 c.h.)/ENG 106 Language, Thought and Culture (3 c.h.), or completion of the second level of American Sign Language.

Student Learning Outcomes

The student learning outcomes apply for both the BS and BA degrees in Criminology.

Upon completion of the criminology major, students should be able to demonstrate:

1. A comprehension of and the ability to critically assess and compare the major criminological theoretical perspectives.
2. An ability to understand, interpret, and apply various research methodologies in the field of criminology
3. An ability to apply criminological theories and methods to substantive issues and in order to understand social problems and inform crime-related social policy.
4. An ability to engage in critical thinking about various aspects of social life and organization, including crime and criminal justice institutions.

Specific Program Requirements

- *Note: Criminology majors are required to take* SOC 101 Introduction to Sociology (GT-SS3) (3 c.h.) *as one of their general education social science (SS) requirements.*
- Completion of 36 credit hours of criminology coursework is required for the major. All criminology majors will work with a faculty advisor who will assist in the selection of courses to complete academic requirements.
- A minimum grade of C is required in all courses counting toward the criminology major.

Course	Title	Credits
CORE REQUIREMENTS		
CRIM 101	Introduction to Criminology	3
CRIM 205	Research Methods	3
CRIM 310	Criminological Theory	3
ELECTIVES		
Select 27 credit hours of criminology electives		27
Total Credits		**36**

Criminology Electives

A total of 27 credit hours of criminology electives are required for the major, including a minimum of 18 credit hours of upper-division electives. Electives accepted toward the major can include a maximum of 6.0 credit hours of anthropology and/or sociology. **These courses must be approved by a criminology faculty advisor.**

Course	Title	Credits
CRIM 203	The Criminal Justice System	3
CRIM 212	The Forensics of Bones	3
CRIM 252	Understanding Lived Experiences	3
CRIM 261	Introduction to Cannabis Studies	3
CRIM 291	Special Topics	1-3
CRIM 303	Deviance	3

CRIM 304	Race and Crime	3
CRIM 305	Women & Crime	3
CRIM 306	Delinquency and Juvenile Justice	3
CRIM 321	Cross-Cultural Perspective on Crime	3
CRIM 353	Penology	3
CRIM 357	Immigration	3
CRIM 361	Advanced Cannabis Studies	3
CRIM 374	Crime in Film	3
CRIM 376	Crime & Society in Science Fiction	3
CRIM 401	Crime, Law, & Justice Studies	3
CRIM 405	Law & Society	3
CRIM 407	Family Violence	3
CRIM 409	Victimology	3
CRIM 410	Structural & Elite Crime	3
CRIM 411	Police and Society	3
CRIM 413	Patterns of Homicide	3
CRIM 415	Forensic Criminology	3
CRIM 418	Crime, Drugs, & Social Policy	3
CRIM 422	Terrorism and Mass Murder	3
CRIM 425	Gangs in Contemporary America	3
CRIM 426	Collective Violence and Rioting	3
CRIM 453	Inside Out: Issues in Crime & Justice	3
CRIM 455	Hate Crimes	3
CRIM 492	Research (CREDITS VARY)	1-3
CRIM 494	Field Experience (CREDITS VARY)	1-12
CRIM 495	Independent Study (CREDITS VARY)	1-3

Criminology, Bachelor of Science

Criminology examines the making of laws, the nature and extent of crime and criminality, and efforts to control crime. The criminology program provides students with a strong foundation in sociological theory and research to foster a comprehensive and contextual understanding of crime and justice in society and the capacity to think critically and creatively about what does and doesn't work in current crime control efforts. The organizations and institutions developed to respond to crime, including all the sub-components of the criminal justice system, will be examined along with the related concepts of law and justice. Courses focus on the social construction or definitions of crime, the causes of crime and delinquency, and on the origin, nature, and consequences of societal reactions to criminal offending, including practices in both public and private justice agencies. Students pursuing careers in traditional criminal justice fields, such as policing, probation & parole, corrections and reintegration, will develop a strong foundation to work and effect social change in these fields. Criminology majors interested in careers in victim assistance, legal advocacy, community activism and social research will develop the skills and knowledge enabling them to become transformational leaders in their profession.

The criminology curriculum emphasizes the importance of research-based knowledge, theoretically informed practice, critical analysis and ethical decision-making. Students are strongly encouraged to engage in experiential learning through courses, including our field experience class with placements in criminal justice, juvenile justice, victim services, and community-based agencies.

The criminology major prepares students for careers in the adult and juvenile justice systems – including law enforcement and criminal investigation, the courts, probation and parole, corrections, non-profit community based agencies, and victim services – or for graduate and professional programs in criminology, criminal justice, sociology, law, or legal and justice studies.

A criminology major leads to either a Bachelor of Arts (BA) or a Bachelor of Science (BS) degree.

Student Learning Outcomes

The student learning outcomes apply for both the BS and BA degrees in Criminology.

Upon completion of the criminology major, students should be able to demonstrate:

1. A comprehension of and the ability to critically assess and compare the major criminological theoretical perspectives.
2. An ability to understand, interpret, and apply various research methodologies in the field of criminology
3. An ability to apply criminological theories and methods to substantive issues and in order to understand social problems and inform crime-related social policy.
4. An ability to engage in critical thinking about various aspects of social life and organization, including crime and criminal justice institutions.

Specific Program Requirements

Overview [1]

Course	Title	Credits
General Education		35
SOC 101	Introduction to Sociology (GT-SS3)	3
Additional General Educ Requirements		32
Core Requirements		12
Major Electives		24
Certificate or Minor + Electives		24
Open Electives		25
Total Credits		**120**

[1] Total 120 credits must be inclusive of 40 upper division credits.

Specific Requirements

Course	Title	Credits
Core Requirements		
CRIM 101	Introduction to Criminology	3
CRIM 205	Research Methods	3
CRIM 335	Advanced Research Methods	3
CRIM 310	Criminological Theory	3
Electives		
Select 24 credit hours of criminology electives (a minimum of 15 upper division credits)		24
Total Credits		**36**

Criminology Electives

Course	Title	Credits
CRIM 203	The Criminal Justice System	3
CRIM 212	The Forensics of Bones	3

CRIM 252	Understanding Lived Experiences	3
CRIM 261	Introduction to Cannabis Studies	3
CRIM 291	Special Topics	1-3
CRIM 303	Deviance	3
CRIM 304	Race and Crime	3
CRIM 305	Women & Crime	3
CRIM 306	Delinquency and Juvenile Justice	3
CRIM 321	Cross-Cultural Perspective on Crime	3
CRIM 353	Penology	3
CRIM 357	Immigration	3
CRIM 361	Advanced Cannabis Studies	3
CRIM 374	Crime in Film	3
CRIM 376	Crime & Society in Science Fiction	3
CRIM 401	Crime, Law, & Justice Studies	3
CRIM 405	Law & Society	3
CRIM 407	Family Violence	3
CRIM 409	Victimology	3
CRIM 410	Structural & Elite Crime	3
CRIM 411	Police and Society	3
CRIM 413	Patterns of Homicide	3
CRIM 415	Forensic Criminology	3
CRIM 418	Crime, Drugs, & Social Policy	3
CRIM 422	Terrorism and Mass Murder	3
CRIM 425	Gangs in Contemporary America	3
CRIM 426	Collective Violence and Rioting	3
CRIM 453	Inside Out: Issues in Crime & Justice	3
CRIM 455	Hate Crimes	3
CRIM 492	Research	1-3
CRIM 494	Field Experience	1-12
CRIM 495	Independent Study	1-3

Criminology/Sociology Double Major, Bachelor of Arts

The Department of Sociology, Criminology, and Anthropology offers a double major in Sociology and Criminology.The double major gives students the opportunity to specialize in two related fields and explore the disciplines of sociology and criminology in a highly complementary manner. The program provides excellent preparation for students considering careers and/or advanced study in areas such as criminology, sociology, criminal justice, law, law enforcement, public health, business, and social services. The program requirements for the double major and all university-level requirements can be completed in four years.

Students who earn the double major will have the opportunity to develop proficiency with a range of theoretical and methodological tools used by both Criminologists and Sociologists, allowing them to think critically about the structural nature and complexities of social inequality and justice. As social sciences, both disciplines share common methods and many of the same theoretical concerns. Examples include the social construction of deviance; the impact of crime and crime control on communities; the law as a social phenomenon; the organization and functions of each component of the criminal legal system; and the general social, political, and economic frameworks of society that influence the nature and perception of social problems, including crime and social control.

Double majors can earn either a Bachelor of Arts or a Bachelor of Science degree.

Student Learning Outcomes

Upon completion of the sociology/criminology double major, students will demonstrate:

A comprehension of and the ability to critically assess and compare major theoretical perspectives in sociology and criminology.

An ability to understand, interpret, and apply various research methodologies in the fields of sociology and criminology.

Facility in applying sociological and criminological theories and methods to substantive issues and in order to understand social problems and inform social policy.

Engagement in critical thinking about various aspects of social life and organization, including crime and criminal justice institutions.

A critical understanding of social diversity and the implications of race, gender, sexuality, and class for interpersonal and group interaction in contemporary society.

Specific Program Requirements

Course	Title	Credits
CORE REQUIREMENTS		**12**
CRIM 101	Introduction to Criminology	3
SOC 101	Introduction to Sociology (GT-SS3)	3
CRIM/SOC 205	Research Methods	3
CRIM 310	Criminological Theory	3
or SOC 310	Social & Cultural Theory	
ELECTIVES		**54**
Select 54 credit hours of Criminology or Sociology electives. [1]		
Total Credits		**66**

[1] 27 credits must be CRIM courses, and 27 credits must be SOC courses. Exceptions may be approved by faculty advisor. CRIM/SOC cross-listed classes must be counted as either a CRIM elective or SOC elective. No class can be double-counted.

Program electives

A total of 54 credit hours of electives are required for the major, including a minimum of 36 credit hours of upper-division electives.

Course	Title	Credits
CRIM 203	The Criminal Justice System	3
CRIM 212	The Forensics of Bones	3
CRIM 261	Introduction to Cannabis Studies	3
CRIM 291	Special Topics	1-3
CRIM 304	Race and Crime	3
CRIM 305	Women & Crime	3
CRIM 306	Delinquency and Juvenile Justice	3
CRIM 321	Cross-Cultural Perspective on Crime	3
CRIM 353	Penology	3

CRIM 361	Advanced Cannabis Studies	3
CRIM 374	Crime in Film	3
CRIM 376	Crime & Society in Science Fiction	3
CRIM 401	Crime, Law, & Justice Studies	3
CRIM 407	Family Violence	3
CRIM 409	Victimology	3
CRIM 410	Structural & Elite Crime	3
CRIM 411	Police and Society	3
CRIM 413	Patterns of Homicide	3
CRIM 415	Forensic Criminology	3
CRIM 418	Crime, Drugs, & Social Policy	3
CRIM 422	Terrorism and Mass Murder	3
CRIM 425	Gangs in Contemporary America	3
CRIM 426	Collective Violence and Rioting	3
CRIM 455	Hate Crimes	3
CRIM 492	Research (CREDITS VARY)	1-3
CRIM 453	Inside Out: Issues in Crime & Justice	3
CRIM 494	Field Experience (CREDITS VARY)	1-12
CRIM 495	Independent Study (CREDITS VARY)	1-3
SOC 105	Understanding Human Diversity	3
SOC 201	Social Problems (GT-SS1)	3
SOC 231	Marriage & Family Relationships	3
SOC 248	Environmental Sociology	3
SOC 252	Understanding Lived Experiences	3
SOC 291	Special Topics	1
SOC 302	Collective Behavior and Social Movements	3
SOC 303	Deviance	3
SOC 312	Soc on the Fringe Cults & Conspiracy Theories	3
SOC 314	Religion, Culture and Society	3
SOC 315	Health, Culture, and Society	3
SOC 316	Age, Culture and Society	3
SOC 324	Race & Ethnic Relation	3
SOC 325	Gender And Society	3
SOC 326	Social Stratification	3
SOC 334	Sociology of the Military	3
SOC 352	Social Psychology	3
SOC 357	Immigration	3
SOC 370	Popular Culture	3
SOC 373	Film & Society	3
SOC 378	Rock 'n' Roll and Rebellion	3
SOC 388	Community Engagement	3
SOC 388L	Community Engagement Lab	1
SOC 404	Poverty and Inequality in the U.S.	3
SOC 405	Law & Society	3
SOC 408	Science, Technology, and The Future	3
SOC 428	Women & Work	3
SOC 432	Organization Theory	3
SOC 435	The Interviewer's Craft	3
SOC 450	Soc of Mental Health and Suicide	3
SOC 452	The Individual & Society	3
SOC 490	Special Projects	1
SOC 491	Special Topics	1
SOC 492	Research	1
SOC 494	Field Experience	1
SOC 495	Independent Study	1
SOC 498	Internship	3

Additional Requirements

Course	Title	Credits
University General Education Requirements	including BA language requirement	35
Open electives	at least 1.0 credit hour upper division to meet university requirement of 40 upper division credit hours	19

Specific Graduation Requirements

A minimum grade of C is required in all courses counting toward the major.

A minor is not required, but sociology & criminology double majors are encouraged to select a certificate or minor in consultation with a faculty advisor.

SOC 101, Introduction to Sociology, cannot be used to fulfill a general education social science requirement.

Students must fulfill the University language requirement for the Bachelor of Arts degree by completing one of the following:

1. ANTH/ENG 106 Language, Thought and Culture (3 credit hours) and WL 100 Intro to Comparative Linguistics (3 credit hours), or

2. ASL 101 (3 credit hours) and ASL 102 Beginning American Sign Language II (3 credit hours), or

3. Completion of the second level of a world language (course number 102).

For International students, ENG 101 Rhetoric & Writing I (3.0 credit hours) and ENG 102 Rhetoric & Writing II (3.0 c.h.) fulfill the World Language Requirement.

Criminology/Sociology Double Major, Bachelor of Science

The Department of Sociology, Criminology, and Anthropology offers a double major in Sociology and Criminology.#The double major gives students the opportunity to specialize in two related fields and explore the disciplines of sociology and criminology in a highly complementary manner. The program provides excellent preparation for students considering careers and/or advanced study in areas such as criminology, sociology, criminal justice, law, law enforcement, public health, business, and social services. The program requirements for the double major and all university-level requirements can be completed in four years.

Students who earn the double major will have the opportunity to develop proficiency with a range of theoretical and methodological tools used by both Criminologists and Sociologists, allowing them to think critically about the structural nature and complexities of social inequality and justice. As social sciences, both disciplines share common methods and many of the same theoretical concerns. Examples include the social construction of deviance; the impact of crime and crime control on communities; the law as a social phenomenon; the organization and functions of each component of the criminal legal system; and

the general social, political, and economic frameworks of society that influence the nature and perception of social problems, including crime and social control.

Double majors can earn either a Bachelor of Arts or a Bachelor of Science degree.

Student Learning Outcomes

Upon completion of the sociology/criminology double major, students will demonstrate:

A comprehension of and the ability to critically assess and compare major theoretical perspectives in sociology and criminology.

An ability to understand, interpret, and apply various research methodologies in the fields of sociology and criminology.

Facility in applying sociological and criminological theories and methods to substantive issues and in order to understand social problems and inform social policy.

Engagement in critical thinking about various aspects of social life and organization, including crime and criminal justice institutions.

A critical understanding of social diversity and the implications of race, gender, sexuality, and class for interpersonal and group interaction in contemporary society.

Specific Program Requirements

Course	Title	Credits
CORE REQUIREMENTS		**12**
CRIM 101	Introduction to Criminology	3
SOC 101	Introduction to Sociology (GT-SS3)	3
CRIM/SOC 205	Research Methods	3
CRIM 310	Criminological Theory	3
or SOC 310	Social & Cultural Theory	
ELECTIVES		**54**
Select 54 credit hours of Criminology or Sociology electives. [1]		
Total Credits		**66**

[1] 27 credits must be CRIM courses, and 27 credits must be SOC courses. Exceptions may be approved by faculty advisor. CRIM/SOC cross-listed classes must be counted as either a CRIM elective or SOC elective. No class can be double-counted.

Program Electives

A total of 54 credit hours of electives are required for the major, including a minimum of 36 credit hours of upper-division electives.

Course	Title	Credits
CRIM 203	The Criminal Justice System	3
CRIM 212	The Forensics of Bones	3
CRIM 261	Introduction to Cannabis Studies	3
CRIM 291	Special Topics	1-3
CRIM 304	Race and Crime	3
CRIM 305	Women & Crime	3
CRIM 306	Delinquency and Juvenile Justice	3
CRIM 321	Cross-Cultural Perspective on Crime	3
CRIM 353	Penology	3
CRIM 361	Advanced Cannabis Studies	3
CRIM 374	Crime in Film	3
CRIM 376	Crime & Society in Science Fiction	3
CRIM 401	Crime, Law, & Justice Studies	3
CRIM 407	Family Violence	3
CRIM 409	Victimology	3
CRIM 410	Structural & Elite Crime	3
CRIM 411	Police and Society	3
CRIM 413	Patterns of Homicide	3
CRIM 415	Forensic Criminology	3
CRIM 418	Crime, Drugs, & Social Policy	3
CRIM 422	Terrorism and Mass Murder	3
CRIM 425	Gangs in Contemporary America	3
CRIM 426	Collective Violence and Rioting	3
CRIM 455	Hate Crimes	3
CRIM 492	Research (CREDITS VARY)	1-3
CRIM 453	Inside Out: Issues in Crime & Justice	3
CRIM 494	Field Experience (CREDITS VARY)	1-12
CRIM 495	Independent Study (CREDITS VARY)	1-3
SOC 105	Understanding Human Diversity	3
SOC 201	Social Problems (GT-SS1)	3
SOC 231	Marriage & Family Relationships	3
SOC 248	Environmental Sociology	3
SOC 252	Understanding Lived Experiences	3
SOC 291	Special Topics	1
SOC 302	Collective Behavior and Social Movements	3
SOC 303	Deviance	3
SOC 312	Soc on the Fringe Cults & Conspiracy Theories	3
SOC 314	Religion, Culture and Society	3
SOC 315	Health, Culture, and Society	3
SOC 316	Age, Culture and Society	3
SOC 324	Race & Ethnic Relation	3
SOC 325	Gender And Society	3
SOC 326	Social Stratification	3
SOC 334	Sociology of the Military	3
SOC 352	Social Psychology	3
SOC 357	Immigration	3
SOC 370	Popular Culture	3
SOC 373	Film & Society	3
SOC 378	Rock 'n' Roll and Rebellion	3
SOC 388	Community Engagement	3
SOC 388L	Community Engagement Lab	1
SOC 404	Poverty and Inequality in the U.S.	3
SOC 405	Law & Society	3
SOC 408	Science, Technology, and The Future	3
SOC 428	Women & Work	3
SOC 432	Organization Theory	3
SOC 435	The Interviewer's Craft	3
SOC 450	Soc of Mental Health and Suicide	3
SOC 452	The Individual & Society	3
SOC 490	Special Projects	1

SOC 491	Special Topics	1
SOC 492	Research	1
SOC 494	Field Experience	1-12
SOC 495	Independent Study	1
SOC 498	Internship	3

Additional Requirements

Course	Title	Credits
University General Education Requirements		35
Open electives	at least 1.0 credit hour upper division to meet university requirement of 40 upper division credit hours	19

Specific Graduation Requirements

A minimum grade of C is required in all courses counting toward the major.

A minor is not required, but sociology & criminology double majors are encouraged to select a certificate or minor in consultation with a faculty advisor.

SOC 101, Introduction to Sociology, cannot be used to fulfill a general education social science requirement.

Criminology: Community Engagement Concentration, Bachelor of Science

The community engagement concentration in criminology provides students an opportunity to connect criminological knowledge and methods learned in the classroom to the surrounding community. Students will work closely with a faculty mentor and community-based organizations to learn job skills and create an advocacy project to create positive and meaningful change.

Students will complete the three core criminology courses (9 credits) plus three community engagement core courses (7 credits). Additionally, they will complete 21 credits of criminology electives, including at least 12 credits of upper division electives.

Student Learning Outcomes

Upon completion of the criminology major, students should be able to demonstrate:

1. A comprehension of and the ability to critically assess and compare the major criminological theoretical perspectives.
2. An ability to understand, interpret, and apply various research methodologies in the field of criminology
3. An ability to apply criminological theories and methods to substantive issues and in order to understand social problems and inform crime-related social policy.
4. An ability to engage in critical thinking about various aspects of social life and organization, including crime and criminal justice institutions.

Specific Program Requirements

Program Overview [1]

Course	Title	Credits
SOC 101	Introduction to Sociology (GT-SS3)	3
Additional General Education Requirements		32
Core Requirements		16
Major Electives		21
Certificate or Minor + Electives		18
Open electives		30
Total Credits		**120**

[1] Inclusive of a minimum of 40 upper division credits.

Specific Core Requirements

Course	Title	Credits
CRIM 101	Introduction to Criminology	3
CRIM 205	Research Methods	3
CRIM 310	Criminological Theory	3
Total Credits		**9**

Specific Core Requirements

Course	Title	Credits
SOC 388	Community Engagement	3
SOC 388L	Community Engagement Lab	1
SOC 498	Internship	3

Specific Elective Requirements - Choose 21 credits from the list of approved Criminology electives

Course	Title	Credits
Approved Criminology Electives for major	12 credits must be upper division	21
CRIM 203	The Criminal Justice System	3
CRIM 252	Understanding Lived Experiences	3
CRIM 261	Introduction to Cannabis Studies	3
CRIM 291	Special Topics	1-3
CRIM 303	Deviance	3
CRIM 304	Race and Crime	3
CRIM 305	Women & Crime	3
CRIM 306	Delinquency and Juvenile Justice	3
CRIM 321	Cross-Cultural Perspective on Crime	3
CRIM 353	Penology	3
CRIM 357	Immigration	3
CRIM 361	Advanced Cannabis Studies	3
CRIM 401	Crime, Law, & Justice Studies	3
CRIM 405	Law & Society	3
CRIM 407	Family Violence	3
CRIM 409	Victimology	3
CRIM 410	Structural & Elite Crime	3
CRIM 411	Police and Society	3
CRIM 413	Patterns of Homicide	3
CRIM 418	Crime, Drugs, & Social Policy	3
CRIM 422	Terrorism and Mass Murder	3
CRIM 425	Gangs in Contemporary America	3

CRIM 426	Collective Violence and Rioting	3
CRIM 453	Inside Out: Issues in Crime & Justice	3
CRIM 455	Hate Crimes	3
CRIM 491	Special Topics	1-3
CRIM 492	Research	1-3
CRIM 495	Independent Study	1-3

Specific Graduation Requirements

Students must earn a grade of C or higher in any class counted toward the major.

SOC 101, Introduction to Sociology is required for the major and can count toward social science general education requirement.

Majors will select a certificate or minor in consultation with a faculty advisor.

Sociology, Bachelor of Arts

Sociology examines human society with an emphasis on social structure, social interaction, and social change. From the analysis of passing encounters between strangers on the street to the investigation of broad-based global social movements, sociology examines the subtle, yet complex ways individual lives interact and intersect with the collective experience of others. One of the sociology program's special emphases is understanding social inequalities and their implication for social justice. Comparative, cross-national, and cross-cultural perspectives are also offered in many courses.

The analytic frameworks sociologists employ encourage students to think about complex situations in a new way by showing how the social environment influences people's life options, advantages and disadvantages. Sociologists are interested not only in understanding social issues and social organization, but also in resolving social problems and improving social conditions for human populations. With sociological knowledge we become more aware of ourselves, of other people, and of the world we all live in.

To study sociology, a student needs to acquire information (what we know), methodology (how we know), and theory (how we explain).

A major in sociology will require students to develop background and strength in each of these domains. The insights gained from a sociological perspective include the ability to perceive the structures and patterns upon which everyday life rests, to understand the interaction between individual agency and social forces, to interpret events from diverse perspectives, and to examine existing social arrangements critically.

The sociology major prepares students to work in education, research, government, business, human services, community organizing, program development, policy analysis, youth services, criminal justice, crime and violence prevention, and victim services. Sociology also prepares students for graduate studies in sociology or related social sciences, for applied research careers, or for professional degree programs in law, social work, public administration and other fields.

The major is organized to provide a firm foundation in theory and research methods while allowing students to tailor their major to their specific subject interests.

A sociology major leads to either a Bachelor of Arts (BA) or a Bachelor of Science (BS) degree.

For the BA degree, sociology majors must complete all the major degree requirements. In addition, students must complete the world language requirement as specified in the Academic Policies section of the University Catalog. This requirement includes completion of the second level of a world language or completion of WL 100 Intro to Comparative Linguistics (3 c.h.) and ANTH 106 Language, Thought and Culture (3 c.h.)/ENG 106 Language, Thought and Culture (3 c.h.), or completion of the second level of American Sign Language.

Student Learning Outcomes

The student learning outcomes apply for both the BS and BA degrees in Sociology.

Upon completion of the Sociology major, students should be able to:

1. Understand the major theoretical perspectives in sociology through comparing, contrasting, and thinking critically about the roles of these theories in the study of society.
2. Apply a variety of quantitative and qualitative research methods in the gathering and analysis of sociological data and recognize common methodologies used in sociological literature.
3. Use sociological theories and methods to analyze substantive social issues and problems such as deviance, race, gender, sexuality, and class.
4. Demonstrate critical thinking by evaluating arguments and evidence related to social issues and by connecting sociological insights to current events and personal experiences of the social world.

Specific Program Requirements

- Completion of 36 credit hours of sociology coursework is required for the major. All sociology majors will work with a faculty advisor who will assist in the selection of courses to complete academic requirements.
- A minimum grade of C is required in all sociology courses counting toward either the sociology major or the sociology minor.

Course	Title	Credits
CORE REQUIREMENTS		
SOC 101	Introduction to Sociology (GT-SS3)	3
SOC 205	Research Methods	3
SOC 310	Social & Cultural Theory	3
ELECTIVES		
Select 27 credits of sociology electives		27
Total Credits		**36**

Sociology Electives

A total of 27 credit hours of sociology electives are required for the major, including a minimum of 18 credit hours of upper-division (300 or 400-level courses) electives. Electives accepted toward the major can include a maximum of 6.0 credit hours of anthropology and/or criminology. These courses must be approved by a sociology faculty advisor.

Course	Title	Credits
SOC 101	Introduction to Sociology (GT-SS3)	3
SOC 201	Social Problems (GT-SS1)	3
SOC 203	The Criminal Justice System	3

SOC/PSYC/WS 231	Marriage & Family Relationships	3
SOC 248	Environmental Sociology	3
SOC 252	Understanding Lived Experiences	3
SOC 261	Introduction to Cannabis Studies	3
SOC 291	Special Topics	1-3
SOC 302	Collective Behavior and Social Movements	3
SOC 303	Deviance	3
SOC 304	Race and Crime	3
SOC/WS 305	Women & Crime	3
SOC 306	Delinquency and Juvenile Justice	3
SOC 312	Soc on the Fringe Cults & Conspiracy Theories	3
SOC/ANTH 314	Religion, Culture and Society	3
SOC/ANTH 315	Health, Culture, and Society	3
SOC/ANTH 316	Age, Culture and Society	3
SOC 321	Cross-Cultural Perspective on Crime	3
SOC 324	Race & Ethnic Relation	3
SOC 325	Gender And Society	3
SOC 326	Social Stratification	3
SOC 334	Sociology of the Military	3
SOC/PSYC 352	Social Psychology	3
SOC 357	Immigration	3
SOC 361	Advanced Cannabis Studies	3
SOC 370	Popular Culture	3
SOC 373	Film & Society	3
SOC 374	Crime in Film	3
SOC 376	Crime & Society in Science Fiction	3
SOC 378	Rock 'n' Roll and Rebellion	3
SOC 388 & 388L	Community Engagement and Community Engagement Lab	4
SOC 404	Poverty and Inequality in the U.S.	3
SOC 405	Law & Society	3
SOC 408	Science, Technology, and The Future	3
SOC 418	Crime, Drugs, & Social Policy	3
SOC 426	Collective Violence and Rioting	3
SOC/HIST/WS 428	Women & Work	3
SOC 432	Organization Theory	3
SOC 435	The Interviewer's Craft	3
SOC 450	Soc of Mental Health and Suicide	3
SOC 452	The Individual & Society	3
SOC 453		3
SOC 490	Special Projects	1-3
SOC 491	Special Topics	1-3
SOC 492	Research	1-3
SOC 494	Field Experience	1-12
SOC 495	Independent Study	1-3

Sociology, Bachelor of Science

Sociology examines human society with an emphasis on social structure, social interaction, and social change. From the analysis of passing encounters between strangers on the street to the investigation of broad-based global social movements, sociology examines the subtle, yet complex, ways individual lives interact and intersect with the collective experience of others. One of the sociology program's special emphases is understanding social inequalities and their implication for social justice. Comparative, cross-national, and cross-cultural perspectives are also offered in many courses.

The analytic frameworks sociologists employ encourage students to think about complex situations in a new way by showing how the social environment influences people's life options, advantages and disadvantages. Sociologists are interested not only in understanding social issues and social organization, but also in resolving social problems and improving social conditions for human populations. With sociological knowledge we become more aware of ourselves, of other people, and of the world we all live in.

To study sociology, a student needs to acquire information (what we know), methodology (how we know), and theory (how we explain). A major in sociology will require students to develop background and strength in each of these domains. The insights gained from a sociological perspective include the ability to perceive the structures and patterns upon which everyday life rests, to understand the interaction between individual agency and social forces, to interpret events from diverse perspectives, and to examine existing social arrangements critically.

The sociology major prepares students to work in education, research, government, business, human services, community organizing, program development, policy analysis, youth services, criminal justice, crime and violence prevention, and victim services. Sociology also prepares students for graduate studies in sociology or related social sciences, for applied research careers, or for professional degree programs in law, social work, public administration and other fields.

The major is organized to provide a firm foundation in theory and research methods while allowing students to tailor their major to their specific subject interests.

A sociology major leads to either a Bachelor of Arts (BA) or a Bachelor of Science (BS) degree.

Student Learning Outcomes

The student learning outcomes apply for both the BS and BA degrees in Sociology.

Upon completion of the Sociology major, students should be able to:

1. Understand the major theoretical perspectives in sociology through comparing, contrasting, and thinking critically about the roles of these theories in the study of society.
2. Apply a variety of quantitative and qualitative research methods in the gathering and analysis of sociological data and recognize common methodologies used in sociological literature.
3. Use sociological theories and methods to analyze substantive social issues and problems such as deviance, race, gender, sexuality, and class.
4. Demonstrate critical thinking by evaluating arguments and evidence related to social issues and by connecting sociological insights to current events and personal experiences of the social world.

Specific Program Requirements

Program Overview [1]

Course	Title	Credits
General Education		35
Core Requirements		12
Major Electives (a minimum of 15 upper division credits)		24
Certificate or Minor + Electives		24
Open Electives		25
Total Credits		**120**

[1] The 120 credits earned must be Inclusive of a minimum of 40 upper division credits.

Program Requirements

Course	Title	Credits
Core Requirements		
SOC 101	Introduction to Sociology (GT-SS3)	3
SOC 205	Research Methods	3
SOC 335	Advanced Research Methods	3
SOC 310	Social & Cultural Theory	3
Electives		
Select 24 credits hours of sociology electives (a minimum of 15 upper division credits)		24
Total Credits		**36**

Sociology Electives

Course	Title	Credits
SOC 105	Understanding Human Diversity	3
SOC 201	Social Problems (GT-SS1)	3
SOC 203	The Criminal Justice System	3
SOC 231	Marriage & Family Relationships	3
SOC 248	Environmental Sociology	3
SOC 252	Understanding Lived Experiences	3
SOC 261	Introduction to Cannabis Studies	3
SOC 291	Special Topics	1-3
SOC 302	Collective Behavior and Social Movements	3
SOC 303	Deviance	3
SOC 304	Race and Crime	3
SOC 305	Women & Crime	3
SOC 306	Delinquency and Juvenile Justice	3
SOC 312	Soc on the Fringe Cults & Conspiracy Theories	3
SOC 314	Religion, Culture and Society	3
SOC 315	Health, Culture, and Society	3
SOC 316	Age, Culture and Society	3
SOC 321	Cross-Cultural Perspective on Crime	3
SOC 324	Race & Ethnic Relation	3
SOC 325	Gender And Society	3
SOC 326	Social Stratification	3
SOC 334	Sociology of the Military	3
SOC 352	Social Psychology	3
SOC 357	Immigration	3
SOC 361	Advanced Cannabis Studies	3
SOC 370	Popular Culture	3
SOC 373	Film & Society	3
SOC 374	Crime in Film	3
SOC 376	Crime & Society in Science Fiction	3
SOC 378	Rock 'n' Roll and Rebellion	3
SOC 388	Community Engagement	3
SOC 388L	Community Engagement Lab	1
SOC 404	Poverty and Inequality in the U.S.	3
SOC 405	Law & Society	3
SOC 408	Science, Technology, and The Future	3
SOC 418	Crime, Drugs, & Social Policy	3
SOC 426	Collective Violence and Rioting	3
SOC 428	Women & Work	3
SOC 432	Organization Theory	3
SOC 435	The Interviewer's Craft	3
SOC 450	Soc of Mental Health and Suicide	3
SOC 452	The Individual & Society	3
SOC 490	Special Projects	1-3
SOC 491	Special Topics	1-3
SOC 492	Research	1-3
SOC 494	Field Experience	1-12
SOC 495	Independent Study	1-3

Sociology, Minor

Why study sociology?

1. You will master a range of **transferable skills** opening doors to a wide range of career options.

2. You will gain an understanding of **different points of view** from the diverse students in our program preparing you to succeed in an increasingly diverse and complex world.

3. The varied topics of study and breadth of the discipline foster **versatility and adaptability**, complementing other degree programs. Many sociology majors opt to complete a second major in criminology or psychology.

4. Our students want to make a difference in their community and in the world and the knowledge and skills you take away from the program prepare you to be a **positive change agent**.

5. **Relevant and dynamic** as a field of study, sociologists engage the issues that impact our daily lives and examine how the rapidly changing social environment will shape our future.

A minor in sociology is an excellent complement for a number of different majors, including Criminology, Psychology, Political Science, History, Social Work, and Spanish. Sociology minors are interested in careers in criminal justice, victim advocacy, youth programming, health-related fields, counseling, non-profit community agencies, government, higher education, human resource management, business, community planning, program development, and public policy. All professionals need to understand individuals and groups and the social contexts that shape peoples' attitudes, choices, and behaviors.

From analyzing the implications of wide-ranging contemporary social issues and social inequalities to understanding the interplay among science, technology, and society, the diversity of course offerings allows

sociology minors to explore topics relevant to their interests. From exploring how our lives are reflected in popular culture, in music, and in films to examining the underlying patterns of social relations in small groups and formal organizations, in legal institutions, and in the economic and political arena, our classes enrich understanding in a number of areas.

Students not earning a major in sociology can add a sociology minor to their degree program.

Specific Program Requirements

Minors in sociology require a minimum of 18 semester hours, of which 9 hours must be upper division. SOC 101 is required. No grades below C are accepted toward the minor.

Course	Title	Credits
SOC 101	Introduction to Sociology (GT-SS3)	3
Select 9 credits in upper division Sociology courses		9
Select 6 additional credits in Sociology courses.		6
Total Credits		**18**

Sociology: Community Engagement Concentration, Bachelor of Arts

The community engagement concentration in sociology provides students an opportunity to connect sociological knowledge and methods learned in the classroom to the surrounding community. Students will work closely with a faculty mentor and community-based organizations to learn job skills and create an advocacy project to create positive and meaningful change.

Students will complete the three core sociology courses (9 credits) plus three community engagement core courses (7 credits). Additionally, they will complete 21 credits of sociology electives, including at least 12 credits of upper division electives.

Student Learning Outcomes

Upon completion of **the Sociology major**, students should be able to:

1. Understand the major theoretical perspectives in sociology through comparing, contrasting, and thinking critically about the roles of these theories in the study of society.

2. Apply a variety of quantitative and qualitative research methods in the gathering and analysis of sociological data and recognize common methodologies used in sociological literature.

3. Use sociological theories and methods to analyze substantive social issues and problems such as deviance, race, gender, sexuality, and class.

4. Demonstrate critical thinking by evaluating arguments and evidence related to social issues and by connecting sociological insights to current events and subjective experiences of the social world.

Specific Program Requirements

Program Overview [1]

Course	Title	Credits
General Education		35
Core Requirements		16
Major Electives		21
Certificate or Minor + Electives		18
Open Electives		30
Total Credits		**120**

[1] Inclusive of a minimum of 40 upper division credits

Specific Core Requirements

Course	Title	Credits
SOC 101	Introduction to Sociology (GT-SS3)	3
SOC 205	Research Methods	3
SOC 310	Social & Cultural Theory	3
Total Credits		**9**

Specific Core Requirements

Course	Title	Credits
SOC 388	Community Engagement	3
SOC 388L	Community Engagement Lab	1
SOC 498	Internship	3

Specific Electives Requirements

Course	Title	Credits
Approved Sociology Electives for major [12 credits must be upper division.]		**21**
SOC 105	Understanding Human Diversity	3
SOC 201	Social Problems (GT-SS1)	3
SOC 203	The Criminal Justice System	3
SOC 231	Marriage & Family Relationships	3
SOC 248	Environmental Sociology	3
SOC 252	Understanding Lived Experiences	3
SOC 261	Introduction to Cannabis Studies	3
SOC 291	Special Topics	1
SOC 302	Collective Behavior and Social Movements	3
SOC 303	Deviance	3
SOC 304	Race and Crime	3
SOC 305	Women & Crime	3
SOC 306	Delinquency and Juvenile Justice	3
SOC 312	Soc on the Fringe Cults & Conspiracy Theories	3
SOC 314	Religion, Culture and Society	3
SOC 315	Health, Culture, and Society	3
SOC 316	Age, Culture and Society	3
SOC 321	Cross-Cultural Perspective on Crime	3
SOC 324	Race & Ethnic Relation	3
SOC 325	Gender And Society	3
SOC 326	Social Stratification	3
SOC 334	Sociology of the Military	3
SOC 352	Social Psychology	3
SOC 357	Immigration	3
SOC 361	Advanced Cannabis Studies	3
SOC 404	Poverty and Inequality in the U.S.	3
SOC 405	Law & Society	3
SOC 408	Science, Technology, and The Future	3
SOC 418	Crime, Drugs, & Social Policy	3

SOC 426	Collective Violence and Rioting	3
SOC 428	Women & Work	3
SOC 432	Organization Theory	3
SOC 435	The Interviewer's Craft	3
SOC 450	Soc of Mental Health and Suicide	3
SOC 452	The Individual & Society	3
SOC 453		3

Specific Graduation Requirements

Students must earn a grade of C or higher in any class counted toward the major.

Majors will select a certificate or minor in consultation with a faculty advisor.

Majors may not use SOC 101 as a general education social science requirement. SOC 201 and SOC 231 cannot fulfill both major and general education requirements.

Recommended for World Language Requirement: WL 100 Intro to Comparative Linguistics and ANTH/ENG 106 Language, Thought and Culture or completion of the second level of American Sign Language.

Sociology: Community Engagement Concentration, Bachelor of Science

The community engagement concentration in sociology provides students an opportunity to connect sociological knowledge and methods learned in the classroom to the surrounding community. Students will work closely with a faculty mentor and community-based organizations to learn job skills and create an advocacy project to create positive and meaningful change.

Students will complete the three core sociology courses (9 credits) plus three community engagement core courses (7 credits). Additionally, they will complete 21 credits of sociology electives, including at least 12 credits of upper division electives.

Student Learning Outcomes

Upon completion of **the Sociology major**, students should be able to:

1. Understand the major theoretical perspectives in sociology through comparing, contrasting, and thinking critically about the roles of these theories in the study of society.

2. Apply a variety of quantitative and qualitative research methods in the gathering and analysis of sociological data and recognize common methodologies used in sociological literature.

3. Use sociological theories and methods to analyze substantive social issues and problems such as deviance, race, gender, sexuality, and class.

4. Demonstrate critical thinking by evaluating arguments and evidence related to social issues and by connecting sociological insights to current events and subjective experiences of the social world.

Specific Program Requirements

Program Overview [1]

Course	Title	Credits
General Education		35
Core Requirements		16
Major Electives		21
Certificate or Minor + Electives		18
Open Electives		30
Total Credits		**120**

[1] Inclusive of a minimum of 40 upper division credits.

Specific Core Requirements

Course	Title	Credits
SOC 101	Introduction to Sociology (GT-SS3)	3
SOC 205	Research Methods	3
SOC 310	Social & Cultural Theory	3
Total Credits		**9**

Specific Core Requirements

Course	Title	Credits
SOC 388	Community Engagement	3
SOC 388L	Community Engagement Lab	1
SOC 498	Internship	3

Specific Elective Requirements - Choose 21 credits from the list of approved Sociology electives

Course	Title	Credits
Approved Sociology Electives for major [12 credits must be upper division.]		**21**
SOC 105	Understanding Human Diversity	3
SOC 201	Social Problems (GT-SS1)	3
SOC 203	The Criminal Justice System	3
SOC 231	Marriage & Family Relationships	3
SOC 248	Environmental Sociology	3
SOC 252	Understanding Lived Experiences	3
SOC 261	Introduction to Cannabis Studies	3
SOC 291	Special Topics	1
SOC 302	Collective Behavior and Social Movements	3
SOC 303	Deviance	3
SOC 304	Race and Crime	3
SOC 305	Women & Crime	3
SOC 306	Delinquency and Juvenile Justice	3
SOC 312	Soc on the Fringe Cults & Conspiracy Theories	3
SOC 314	Religion, Culture and Society	3
SOC 315	Health, Culture, and Society	3
SOC 316	Age, Culture and Society	3
SOC 321	Cross-Cultural Perspective on Crime	3
SOC 324	Race & Ethnic Relation	3
SOC 325	Gender And Society	3
SOC 326	Social Stratification	3
SOC 334	Sociology of the Military	3

SOC 352	Social Psychology	3
SOC 357	Immigration	3
SOC 361	Advanced Cannabis Studies	3
SOC 404	Poverty and Inequality in the U.S.	3
SOC 405	Law & Society	3
SOC 408	Science, Technology, and The Future	3
SOC 418	Crime, Drugs, & Social Policy	3
SOC 426	Collective Violence and Rioting	3
SOC 428	Women & Work	3
SOC 432	Organization Theory	3
SOC 435	The Interviewer's Craft	3
SOC 450	Soc of Mental Health and Suicide	3
SOC 452	The Individual & Society	3
SOC 453		3
SOC 491	Special Topics	1
SOC 495	Independent Study	1

Specific Graduation Requirements

Students must earn a grade of C or higher in any class counted toward the major.

Majors will select a certificate or minor in consultation with a faculty advisor.

Majors may not use SOC 101 as a general education social science requirement. SOC 201 and SOC 231 cannot fulfill both major and general education requirements.

Women's Studies, Minor

Mission

The Women's Studies Minor is an interdisciplinary program that studies the cultural and social construction of gender, explores the history, experiences, and contributions of women, and examines the influence of gender in human society. In dynamic and interactive learning spaces, students and professors examine how gender and intersectionality shape the human experience. By exploring the complexities of gender, through history, culture, theory, research, and contemporary events, we begin to understand gender's powerful influence and its inherently mutable nature. Minors develop a complex understanding of social, political, economic, and cultural issues, making them valuable members of their communities and workplaces.

Through a combination of coursework, internship and research opportunities, and community engagement, women's studies minors are empowered to become engaged citizens and self-reflective agents of social justice. They strive to be community leaders and to advocate for positive social change. The women's studies curriculum challenges what you think you know and asks you to analyze social systems of power in your personal life and in the broader world. Women's studies students develop the ability to recognize, deconstruct, and challenge intersectional systems of power.

During their time in the program, women's studies minors gain a number of marketable skills. Completing a women's studies minor ensures students are able to ask incisive questions, think innovatively, and work collaboratively with people holding different points of view. Our graduates are sophisticated critical thinkers; they can synthesize different types of information and apply their knowledge to real world situations. Women's studies minors develop a variety of skills that are becoming increasingly important in 21st Century work spaces, ranging from intercultural competence to effective community building. They become life-long learners with extensive experience in complex problem solving. Minors gain advanced multicultural competencies that allow them to closely analyze texts and social systems and to write and speak with confidence in local, national and global contexts.

A minor (18 credits) in women's studies enhances any program of study and will benefit students planning to pursue careers in any of the following areas: public health, social and human services, criminal justice, victim advocacy, education, public policy, community organization, law, education, creative writing, media, journalism, human resources and business.

Student Learning Outcomes

Students will be able to:

- Demonstrate a working knowledge of women's participation in, contribution to, and transformation of areas of social life including culture, society, politics, economics, and religion.
- Demonstrate a working knowledge of institutionalized discrimination and violence based on gender.
- Demonstrate a critical understanding of gender from national and global perspectives.
- Demonstrate and apply the basic concepts, theories and methods in gender studies in national and global contexts.

Outcome Assessment Activities

Women's studies minors' performance on each of the program's student learning outcomes will be assessed annually. Assessment results will be used to identify program strengths and to discern areas needing improvement to enhance student performance in relation to the student learning outcomes.

Specific Program Requirements

Course	Title	Credits
Required Courses		**9**
WS 100	Introduction to Women's Studies	3
WS 301	Theories of Intersectionality	3
WS/CS 306	La Chicana	3
or WS 308	Global Feminisms	
Senior Capstone Experience Courses	**Select 3 credits from the following:**	**3**
WS 485	Capstone	3
WS 490	Special Projects	1-3
WS 492	Research	1-3
Elective Courses	**Must be WS courses.**	**6**
Total Credits		**18**

Specific Program Electives

Course	Title	Credits
MAE 211	Women & Media	3
WS/ANTH/PSYC/SOC 105	Understanding Human Diversity	3
WS/PSYC 211	Women & Media	3
WS/PSYC 212	Psychology of Diversity	3
WS/NSG 230	Women, Health, & Society	3

WS/PSYC/SOC 231	Marriage and Family Relationships	3
WS/ENG 241	Women in Literature	3
WS/SOC 305	Women & Crime	3
WS/CS 306	La Chicana	3
WS 308	Global Feminisms	3
WS/MAE 311	Gender & Film	3
WS/CID 335	Gender & Communication	3
WS/CS 401	Third World Feminisms	3
WS/CRIM 407	Family Violence	3
WS/HIST/SOC 428	Women & Work	3
WS/CRIM 455	Hate Crimes	3
WS 485	Capstone	3
WS 490	Special Projects	1-3
WS 291/491	Special Topics	1-3
WS 492	Research	1-3
WS 494	Field Experience	2-6
WS 498	Internship	2-6

Specific Program Cross-Listings

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 academic departments. This is indicated above, for example as WS 428 Women & Work (3 c.h.) /HIST 428 Women & Work (3 c.h.)/SOC 428 Women & Work (3 c.h.), indicating that the course is listed as a Women's Studies course, a History course, and a Sociology course. Students can take the courses by enrolling in a Women's Studies section (call number) or in another department's call number. To encourage breadth in their Women's Studies Minor, students are required to choose electives in different cross-listed disciplines. Students registering for a course for the minor should enroll in the Women's Studies section (call number). A course taken for the Senior Capstone Experience cannot be cross-listed.

Specific Program Senior Capstone Experience

(WS 485 Capstone (3 c.h.), WS 490 Special Projects (1-3 c.h.), or WS 492 Research (1-3 c.h.))

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 relevant to women's life experiences.

The expectation is that in taking WS 490 Special Projects (1-3 c.h.) the student will apply women's studies in a community-based setting. WS 492 Research (1-3 c.h.), can also be approved for the Senior Capstone Experience, 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 Introduction to Women's Studies (3 c.h.), WS 301 Theories of Intersectionality (3 c.h.) and either WS 306 La Chicana (3 c.h.)/CS 306 La Chicana (3 c.h.) OR WS 308 Global Feminisms (3 c.h.).

Grades below a C will not be accepted in classes counting toward the minor.

Veteran Studies, Minor

Mission

The Veteran's Studies minor at Colorado State University Pueblo exists to meet the needs of students who wish to pursue a career working with the veteran population in any field, such as nursing, healthcare, public administration, marketing and business, and counseling, and to develop an appreciation and understanding of the context of military experience. The minor also serves veteran students who wish to place their own personal experiences into a broader context.

Student Learning Outcomes

At the completion of this program, graduates will be able to:

- Identify major historical and contemporary trends in Veterans Studies;
- Evaluate theoretical perspectives in understanding the Veteran experience; and
- Act ethically and responsibly, both individually and with others, demonstrating an awareness and respect for Veterans.

Specific Program Requirements

Minors must complete a total of 21 credit hours, divided into three categories:

Course	Title	Credits
The Context of the Veteran Experience (choose 6 credits)		6
HIST 368	Blood, Tears & Glory: War & History	3
POLS 230	War & Film	3
POLS 305	International Conflict	3
POLS 306	Peace Studies	3
Working with Veteran Populations (choose 6 credits)		6
PSYC 220	Drugs and Behavior	3
PSYC 362	Abnormal Psychology	3
PSYC 471	Clinical Psychology	3
SW 341	Impact of Trauma in Social Work	3
Electives (Choose 9 credits, including any courses listed above not taken for those requirements)		9
POLS 271	Terrorism	3
Internships, research, special topics, and independent studies. [1]		
Total Credits		**21**

[1] With consent of advisor

Note: Only one history, political science, psychology, or social work course taken for the Veterans Studies Minor can count toward the disciplinary major or minor.

Only grades of C or better count towards completion of the minor requirements.

COLLEGE OF SCIENCE, TECHNOLOGY, ENGINEERING, & MATHEMATICS

The College of Science, Technology, Engineering, & Mathematics (CSTEM) prepares students for challenging careers in the STEM fields and provides opportunities for students to advance in graduate studies or professional schools. The ability to think critically and capacity to solve problems are key student outcomes. An invested and caring faculty and staff ensure that students are successful through quality teaching, scholarly activity, and student support and advising. The CSTEM 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 CSTEM supports the community, region, and related professions through outreach including initiatives that enhance economic development, scientific and professional literacy, and K-12 education.

Academic Departments & Programs

Biology Department (p. 387)

Undergraduate Programs

- Biology/Chemistry Double Major, Bachelor of Science (p. 405)
- Biology: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 406)
- Biology: Basic Biology Concentration, Bachelor of Science (p. 407)
- Biology: Biomedical Sciences Concentration, Bachelor of Science (p. 408)
- Biology: Cellular & Molecular Biosciences Concentration, Bachelor of Science (p. 409)
- Biology: Environmental Biosciences Concentration, Bachelor of Science (p. 410)
- Wildlife & Natural Resources: Aquatic Concentration, Bachelor of Science (p. 411)
- Wildlife & Natural Resources: Terrestrial Concentration, Bachelor of Science (p. 412)

Minors

- Biology, Minor (p. 404)

3+2 Programs

- Biology 3+2 Program, Bachelor of Science/Master of Science (p. 401)

Graduate Programs

- Biology, Master of Science (p. 403)

Chemistry Department (p. 413)

Undergraduate Programs

- Cannabis Biology & Chemistry: Analytical Concentration, Bachelor of Science (p. 430)
- Cannabis Biology & Chemistry: Hemp Agriculture Concentration, Bachelor of Science (p. 430)
- Cannabis Biology & Chemistry: Natural Products Concentration, Bachelor of Science (p. 431)
- Chemistry/Biology Double Major, Bachelor of Science (p. 436)
- Chemistry: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 437)
- Chemistry: ACS Certified Concentration, Bachelor of Science (p. 438)
- Chemistry: Basic Chemistry Concentration, Bachelor of Science (p. 439)
- Chemistry: Biochemistry Concentration, Bachelor of Science (p. 440)
- Chemistry: Environmental Chemistry Concentration, Bachelor of Science (p. 442)

Minors

- Chemistry, Minor (p. 435)

Certificates

- Cannabis Biology & Chemistry, Certificate (p. 427)

3+2 Programs

- Biochemistry 3+2 Plan, Joint Bachelor of Science/Master of Science (p. 422)
- Cannabis Biology & Chemistry 3+2 Plan, Joint Bachelor of Science/Master of Science (p. 426)
- Chemistry 3+2 Plan, Joint Bachelor of Science/Master of Science (p. 432)

Graduate Programs

- Biochemistry, Master of Science (p. 424)
- Cannabis Biology & Chemistry, Master of Science (p. 427)
- Chemistry, Master of Science (p. 434)

Post-Baccalaureate Certificates

- Cannabis Biology & Chemistry, Post-Baccalaureate Certificate (p. 429)

School of Engineering (p. 468)

Undergraduate Programs

- Civil Engineering, Bachelor of Science in Civil Engineering (p. 478)
- Engineering, Bachelor of Science in Engineering: Mechatronics Specialization (p. 480)
- Industrial Engineering, Bachelor of Science in Industrial Engineering (p. 483)
- Pre-Engineering Program (p. 486)

Minors

- Engineering, Minor (p. 481)
- Industrial Engineering, Minor (p. 484)
- Sustainability, Minor (p. 487)

Certificates

- Graduate Certificate in Railroad Engineering, Post-Baccalaureate Certificate (p. 481)
- Lean Green Belt, Certificate (p. 485)
- Six Sigma Green Belt, Certificate (p. 486)
- Sustainability, Certificate (p. 487)

3+2 Programs

- Engineering 3+2 Program, Bachelor of Science/Master of Science (p. 479)

Graduate Programs

- Industrial & Systems Engineering, Master of Science (p. 482)
- Mechatronics Engineering, Master of Science (p. 485)

Engineering Technology & Construction Management (p. 443)

Undergraduate Programs

- Civil Engineering Technology, Bachelor of Science in Civil Engineering Technology (p. 447)
- Construction Management, Bachelor of Science (p. 448)

Minors

- Civil Engineering, Minor (p. 448)
- Construction Management, Minor (p. 450)

Certificates

- Construction Procurement, Certificate (p. 450)
- Construction Project Manager, Certificate (p. 451)
- Construction Safety, Law, & Management, Certificate (p. 451)
- Estimating & Planning Construction Costs, Certificate (p. 450)
- Surveying & Modeling, Certificate (p. 451)

Mathematics & Physics Department (https://catalog.csupueblo.edu/college-of-science-technology-engineering-and-mathematics/mathematics-physics/)

Undergraduate Programs

- Math/Physics Double Major, Bachelor of Science (p. 459)
- Mathematics, Bachelor of Arts (p. 460)
- Mathematics, Bachelor of Science (p. 461)
- Mathematics: 7-12 Teacher Preparation Concentration, Bachelor of Arts (p. 462)
- Mathematics: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 463)
- Physics, Bachelor of Science (p. 464)
- Physics: 7-12 Physical Science Teacher Preparation Concentration, Bachelor of Science (p. 465)
- Physics: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 467)

Minors

- Computational Mathematics, Minor (p. 459)
- Mathematics, Minor (p. 462)
- Physics, Minor (p. 465)

Certificates

- Data Analytics, Certficate (p. 459)

Biology Department

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 concentration 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. Interested students may obtain a written description of specific degree requirements from the appropriate education and biology advisors.

Biology students who are considering attending graduate school should take one year of a world language and should plan to take the Graduate Record Examination during the senior year.

The biology department offers several concentration areas:

- Basic Biology
- Biomedical Science
  - Pre-Chiropractic
  - Pre-Dental
  - Pre-Medical (including Osteopathic, Podiatric and Optometric)
  - Pre-Occupational Therapy
  - Pre-Pharmacy
  - Pre-Physical Therapy
  - Pre-Physician Assistant
  - Pre-Veterinary Medicine
- Environmental Biosciences
- Cellular and Molecular Biosciences (Including Forensics & Bioinformatics)
  - Pre-Medical Laboratory Science
- 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.

Elementary Teaching

See Liberal Studies with Science concentration

Institutional & 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.

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.

Wildlife & Natural Resources Program

Majoring in The Wildlife and Natural Resources Program leads to a Bachelor of Science (BS) Degree. In addition, supporting courses and general education courses in biology are available to meet a wide range of interests, backgrounds and needs. The Wildlife and Natural Resources Program emphasizes an understanding of fish and wildlife ecology and management with practical skills obtained during laboratory and field exercises. Graduates are prepared for positions with state and federal agencies, tribal departments, conservation organizations, and higher academic degrees. Carefully supervised career planning is provided to all students.

The Wildlife and Natural Resources Program offers **Aquatic** and **Terrestrial** concentration areas, with curriculum for each meeting the certification requirements of the American Fisheries Society (AFS) or The Wildlife Society (TWS), respectively.

Graduate Programs in Natural Sciences

The College of Science and Mathematics offers Master of Science degrees in three disciplines within the Natural Sciences:

- Biology MS,
- Chemistry MS, and
- Biochemistry MS

Students completing any of these degrees will develop advanced skills in the general discipline of choice and will apply these skills in the completion of a thesis research project or internship. GRE scores of at least 300 (verbal and quantitative) based on the current GRE exam are required for regular admission to GPNS programs.

Academic Programs

Biology

Undergraduate Programs

- Biology/Chemistry Double Major, Bachelor of Science (p. 405)
- Biology: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 406)
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- Biology: Biomedical Sciences Concentration, Bachelor of Science (p. 408)
- Biology: Cellular & Molecular Biosciences Concentration, Bachelor of Science (p. 409)
- Biology: Environmental Biosciences Concentration, Bachelor of Science (p. 410)

Minors

- Biology, Minor (p. 404)

3+2 Program

- Biology 3+2 Program, Bachelor of Science/Master of Science (p. 401)

Graduate Program

- Biology, Master of Science (p. 403)

Wildlife & Natural Resources

Undergraduate Programs

- Wildlife & Natural Resources: Aquatic Concentration, Bachelor of Science (p. 411)
- Wildlife & Natural Resources: Terrestrial Concentration, Bachelor of Science (p. 412)

Biology (BIOL)

BIOL 100 Principles of Biology (GT-SC2) 3(3-0)
Fall, Spring, Summer.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 100L.
(Gen Ed: ST, GT-SC2)

BIOL 100L Principles of Biology Lab (GT-SC1) 1(0-2)
Fall, Spring, Summer.
To expose the student to problem-solving skills emphasizing the importance of observation and data accumulation.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 100.
(Gen Ed: ST, GT-SC1)

BIOL 112 Nutrition 3(3-0)
Fall, Spring, Summer.
Analysis of personal dietary habits and behavior in relation to basic human nutritional needs and food composition.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BIOL 121 Environmental Conservation (GT-SC2) 3(3-0)
Fall, Spring, Summer.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 121L.
(Gen Ed: ST, GT-SC2)

BIOL 121L Environmental Conservation Lab (GT-SC1) 1(0-2)
Fall, Spring, Summer.
Field studies to accompany BIOL 121.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 121.
(Gen Ed: ST, GT-SC1)

BIOL 171 First Year Seminar 1(1-0)
Fall, Spring.
Biology majors entering the program are provided guidance on studying and skills specific to science. Biological career diversity and planning for degree completion are discussed.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BIOL 181 College Biology I/Organismal Bio (GT-SC2) 3(3-0)
Fall, Spring.
Biological diversity and structure-function relationships, evolution and ecology.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 181L.
(Gen Ed: ST, GT-SC2)

BIOL 181L College Biology I/Organismal Bio Lab (GT-SC1) 1(0-2)
Fall, Spring.
College Biology I/Organismal Bio Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 181.
(Gen Ed: ST, GT-SC1)

BIOL 182 College Biology II/Cellular Biology (GT-SC2) 3(3-0)
Fall, Spring.
Continuation of BIOL 181. Basic cell structure and function, reproduction and heredity.
Prerequisite: BIOL 181 and CHEM 111 or CHEM 121.
Corequisite: None.
Registration Information: Co-enrollment in BIOL 182L or BIOL 184L recommended.
(Gen Ed: ST, GT-SC2)

BIOL 182L College Biology II/Cellular Bio Lab (GT-SC1) 1(0-2)
Fall, Spring.
College Biology II/Cellular Bio Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 182.
(Gen Ed: ST, GT-SC1)

BIOL 183 College Biology I Recitation 1(1-0)
As Needed.
Critical thinking for College Biology I topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 181.

BIOL 184 College Biology II Recitation 1(1-0)
As Needed.
Critical thinking for College Biology II topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 182.

BIOL 184L Phage Discovery 2(0-4)
Fall.
Research based introductory course where students find and identify new bacteriophage.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 182.

BIOL 201 Botany (GT-SC2) 2(2-0)
Spring.
Forms, basic structures, relationships, life histories and evolutionary trends of representatives of the major autotrophic plant groups.
Prerequisite: BIOL 181 and BIOL 181L.
Corequisite: BIOL 201L.
Registration Information: None.
(Gen Ed: ST, GT-SC2)

BIOL 201L Botany Laboratory (GT-SC1) 2(0-4)
Spring.
Botany Laboratory.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend prerequisites BIOL 181 and BIOL 181L and BIOL 182 and BIOL 182L. Recommend co-enrollment in BIOL 201.
(Gen Ed: ST, GT-SC1)

BIOL 202 Zoology 2(2-0)
Fall, Spring.
Study of anatomy, physiology, evolution, ecology, and biodiversity of invertebrates and vertebrates.
Prerequisite: BIOL 181 and BIOL 181L.
Corequisite: None.
Registration Information: Recommend c-enrollment in BIOL 202L.
Permission of instructor.
(Gen Ed: ST)

BIOL 202L Zoology Laboratory 2(0-4)
Fall, Spring.
Zoology Laboratory.
Prerequisite: BIOL 181 and BIOL 181L.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 202.
Permission of instructor.
(Gen Ed: ST)

BIOL 203 Zoology Recitation 1(1-0)
As Needed.
Recitation to accompany BIOL 202.
Prerequisite: None.
Corequisite: BIOL 202.
Registration Information: Permission of instructor.

BIOL 206 Introduction to Microbiology 3(3-0)
Fall, Spring, Summer.
For students of nursing and allied health. Applied aspects of medical microbiology.
Prerequisite: BIOL 100 and BIOL 100L or BIOL 223 and BIOL 223L; CHEM 111 and CHEM 111L.
Corequisite: BIOL 206L.
Registration Information: Permission of instructor.

BIOL 206L Introduction to Microbiology Lab 1(0-3)
Fall, Spring, Summer.
Introduction to Microbiology Lab.
Prerequisite: BIOL 100 and BIOL 100L or BIOL 223 and BIOL 223L; CHEM 111 and CHEM 111L.
Corequisite: BIOL 206.
Registration Information: Permission of instructor.

BIOL 220 Medical Terminology 2(2-0)
Spring.
Basic prefixes, word roots, combining forms and suffixes of medical terminology and human anatomy are covered, including pronunciation and patient charting.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BIOL 223 Human Physiology and Anatomy I (GT-SC2) 3(3-0)
Fall, Spring, Summer.
Thorough understanding of the functional/structural aspects of the human body. Topics include body orientation, physiologically important molecules, cell, tissues, integument, skeleton, muscle, nervous system, and senses.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 223L.
(Gen Ed: ST, GT-SC2)

BIOL 223L Human Physiology and Anatomy I Lab (GT-SC1) 1(0-2)
Fall, Spring, Summer.
Human Physiology and Anatomy I Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 223.
(Gen Ed: ST, GT-SC1)

BIOL 224 Human Physiology and Anatomy II (GT-SC2) 3(3-0)
Fall, Spring, Summer.
Structure and function of the human body. Topics include endocrine systems, respiration, digestion, metabolism, excretion, fluid-electrolyte balance, cardiovascular and reproductive functions and special senses.
Prerequisite: BIOL 223.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 224L.
(Gen Ed: ST, GT-SC2)

BIOL 224L Human Physiology and Anatomy II Lab (GT-SC1) 1(0-2)
Fall, Spring, Summer.
Human Physiology and Anatomy II Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 224.
(Gen Ed: ST, GT-SC1)

BIOL 291 Special Topics (1-4 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

BIOL 292 Research (1-3 V)
As Needed.
Faculty directed research project for undergraduate student.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of department chair. Repeatable (3).

BIOL 294 Field Experience (1-4 V)
As Needed.
Volunteer work experience under program director, department coordinator and faculty supervisor.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

BIOL 301 General Microbiology 3(3-0)
Fall, Spring.
Introduction to the bacteria and viruses, including microbial genetics and physiology.
Prerequisite: BIOL 182 and BIOL 182L and CHEM 301 and CHEM 301L.
Corequisite: BIOL 301L.
Registration Information: Permission of the instructor.

BIOL 301L General Microbiology Lab 2(0-4)
Fall, Spring.
General Microbiology Lab.
Prerequisite: BIOL 182 and BIOL 182L and CHEM 301 and CHEM 301L.
Corequisite: BIOL 301.
Registration Information: Permission of the instructor.

BIOL 302 Medical Microbiology 2(2-0)
Spring, Odd.
Survey of pathogenic bacteria, viruses and fungi.
Prerequisite: BIOL 206 or BIOL 301.
Corequisite: BIOL 302L.
Registration Information: None.

BIOL 302L Medical Microbiology Lab 2(0-4)
Spring, Odd.
Medical Microbiology Lab.
Prerequisite: BIOL 206L or BIOL 301L.
Corequisite: BIOL 302.
Registration Information: None.

BIOL 312 Cell Biology 3(3-0)
Fall, Spring.
Structure and function of the cell, life cycle of the cell, protein synthesis and trafficking, cell signaling and specialization.
Prerequisites: BIOL 182 and CHEM 122.
Corequisites: BIOL 312L.
Registration Information: None.

BIOL 312L Cell Biology Laboratory 1(0-3)
Fall, Spring.
Cell Biology Laboratory.
Prerequisites: BIOL 182L and CHEM 122L.
Corequisites: BIOL 312.
Registration Information: None.

BIOL 321 Comparative Vertebrate Anatomy 3(3-0)
Spring.
Comparative study of developmental and functional anatomy of vertebrate animals.
Prerequisite: BIOL 202 and BIOL 202L.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 321L.

BIOL 321L Comparative Vertebrate Anatomy Lab 2(0-4)
Spring.
Comparative Vertebrate Anatomy Lab.
Prerequisite: BIOL 202 and BIOL 202L.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 321.

BIOL 350 Mendelian and Population Genetics 2(2-0)
Fall, Spring.
Survey of basic Mendelian genetics, genetic mapping and population genetics.
Prerequisite: BIOL 182 and MATH 120.
Corequisite: None.
Registration Information: None.

BIOL 351 Molecular Biology & Genetics 3(3-0)
Fall, Spring.
Study of the molecular flow of genetic information, gene regulation and cancer genetics.
Prerequisite: BIOL 350 and CHEM 122 and CHEM122L.
Corequisite: None.
Registration Information: None.

BIOL 351L Molecular Biology & Genetics Laboratory 2(0-4)
Spring.
Molecular biology and bioinformatic investigations of gene function and expression.
Prerequisite: BIOL 182 and BIOL 182L.
Corequisite: BIOL 351.
Registration Information: Permission of instructor.

BIOL 352 Evolutionary Biology and Ecology 3(3-0)
Fall, Spring.
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 and BIOL 181L and BIOL 182 and BIOL182L.
Corequisite: None.
Registration Information: BIOL 350 recommended as prerequisite.

BIOL 378 Laboratory in Teaching Biology 1(0-2)
As Needed.
Laboratory preparation, safety, instruction and methods under the guidance and supervision on an instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Secondary teaching concentration. Approval of department chair. Repeatable (99).

BIOL 392 Research 1(0-4-6)
Fall, Spring, Summer.
Faculty directed research project for undergraduate student.
Prerequisite: None.
Corequisite: None.
Registration Information: Students must have either taken 1 credit of BIOL 292, equivalent research experience (e.g. CBASE/Discovery Scholars, research at a different school, REUs, etc.), or have junior/senior standing. Approval of research faculty required. Repeatable (3).

BIOL 394 Field Experience (1-4 V)
As Needed.
Volunteer work experience under program director, program coordinator, and faculty supervisor.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

BIOL 401 Microbiology 3(3-0)
Fall, Spring.
Introduction to the bacteria and viruses, including cell structure, microbial genetics and physiology.
Prerequisites: BIOL 182 and BIOL 182L and CHEM 301 and CHEM 301L.
Corequisites: BIOL 401L.
Registration Information: None.

BIOL 401L Microbiology Laboratory 1(0-3)
Fall, Spring.
General Microbiology Laboratory. Prerequisites: BIOL 182 and BIOL 182L and CHEM 301 and CHEM 301L.
Corequisites: BIOL 401.
Registration Information: None.

BIOL 402 Immunology 3(3-0)
Spring.
Cellular and molecular interactions and principles of innate and adaptive immunity including immune disorders, hypersensitivity, autoimmunity, infections, and cancer.
Prerequisite: BIOL 206 or BIOL 301 or BIOL 302 or BIOL 401.
Corequisite: None.
Registration Information: Recommend BIOL 351 as prerequisite.

BIOL 403 Virology 3(3-0)
Fall, Even.
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 BIOL 351.
Corequisite: None.
Registration Information: None.

BIOL 403L Virology Lab 1(0-2)
Fall.
Virology Lab.
Prerequisite: BIOL 301 and BIOL 301L and BIOL 351.
Corequisite: BIOL 403.
Registration Information: Permission of instructor.

BIOL 412 Advanced Cellular Biology 3(3-0)
Spring.
Advanced investigations of the structural and functional organization of the cell, life cycles of cells, intracellular digestion, protein synthesis and cell death.
Prerequisite: BIOL 301 and BIOL 301L and BIOL 351 and CHEM 301 and CHEM 301L.
Corequisite: BIOL 412L.
Registration Information: CHEM 302 and 302L strongly recommended as pre or corequisite.

BIOL 412L Advanced Cellular Biology Lab 1(0-3)
Spring.
Advanced Cellular Biology Lab.
Prerequisite: BIOL 301 and 301L and BIOL 351 and CHEM 301 and CHEM 301L.
Corequisite: BIOL 412.
Registration Information: CHEM 302 and 302L are strongly recommended pre or corequisites.

BIOL 413 Plant Physiology 2(2-0)
Spring, Odd.
Thorough examination of general physiology and function of plant body systems.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend prerequisites of BIOL 201 and BIOL 201L and CHEM 301 and CHEM 301L. Recommend co-enrollment in BIOL 413L.

BIOL 413L Plant Physiology Lab 2(0-4)
Spring, Odd.
Plant Physiology Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend prerequisites of BIOL 201 and BIOL 201L and CHEM 301 and CHEM 301L. Recommend co-enrollment in BIOL 413.

BIOL 414 Vertebrate Physiology 3(3-0)
Fall.
General physiology and the functions of animal and human body systems.
Prerequisite: BIOL 202 and BIOL 202L.
Corequisite: None.
Registration Information: CHEM 301 and CHEM 301L and MATH 156 strongly recommended as prerequisite. Recommend co-enrollment in BIOL 414L.

BIOL 414L Vertebrate Physiology Lab 1(0-2)
Fall.
Vertebrate Physiology Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommended co-enrollment in BIOL 414.

BIOL 415 Medical Physiology 3(3-0)
Fall.
Medical physiology focusing on human body systems and their regulation, disorders, diagnosis, and treatments. Includes circulatory, respiratory, endocrine, nervous, muscular, digestive, reproductive, and urinary.
Prerequisites: BIOL 202 and BIOL 202L and CHEM 301 and CHEM 301L.
Corequisites: None.
Registration Information: Must be Junior or Senior level.

BIOL 421 Histology 2(2-0)
Spring, Odd.
A microscopic study of vertebrate tissues and organs.
Prerequisite: BIOL 182 and BIOL 182L and CHEM 122 and CHEM 122L.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 421L.

BIOL 421L Histology Lab 2(0-4)
Spring, Odd.
Histology Lab.
Prerequisite: BIOL 182 and 182L and CHEM 122 and CHEM 122L.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 421.

BIOL 422 Neurobiology 3(3-0)
Spring, Even.
Fundamentals of neuroscience, cellular and molecular signaling in the nervous system, electrophysiological properties of neurons, sensory and motor systems, and cellular mechanisms of cognition.
Prerequisite: BIOL 351.
Corequisite: None.
Registration Information: None.

BIOL 432 Developmental Biology 2(2-0)
As Needed.
Theory and principles of the development of representative vertebrate and invertebrate animals, with particular emphasis on the frog, chick, and Drosophila.
Prerequisite: BIOL 351.
Corequisite: BIOL 432L.
Registration Information: None.

BIOL 432L Developmental Biology Lab 2(0-4)
As Needed.
Developmental Biology Lab.
Prerequisite: None.
Corequisite: BIOL 432.
Registration Information: None.

BIOL 440 Advanced Biotechniques 2(2-0)
Fall, Odd.
Advanced lab covering cellular/molecular techniques and instrumentation. May include Flow cytometry, advanced microscopy, molecular cloning, CRISPR, Western blots, quantitative PCR, and next generation sequencing.
Prerequisite: BIOL 301 and BIOL 301L and BIOL 351.
Corequisite: BIOL 440L.
Registration Information: None.

BIOL 440L Advanced Biotechniques Lab 2(0-2)
Fall, Odd.
Advanced laboratory-based class covering important cellular/molecular techniques and instruments. Topics include Flow cytometry, Advanced Microscopy, Molecular Cloning, CRISPR, Western Blots, and Quantitative PCR.
Prerequisite: BIOL 301 and BIOL 301L and BIOL 351.
Corequisite: BIOL 440.
Registration Information: None.

BIOL 441 Freshwater Invertebrate Zoology 2(2-0)
Spring, Odd.
Classification, phylogeny, systematics, morphology, physiology, and natural history of freshwater invertebrates inclusive of insects.
Prerequisite: None.
Corequisite: BIOL 441L.
Registration Information: BIOL 202 and 202L recommended as prerequisites.

BIOL 441L Freshwater Invertebrate Zoology Lab 2(0-4)
Spring, Odd.
Freshwater Invertebrate Zoology Lab.
Prerequisite: None.
Corequisite: BIOL 441.
Registration Information: None.

BIOL 443 Limnology 2(2-0)
Spring, Even.
Biology, chemistry and physics of lakes and rivers.
Prerequisite: None.
Corequisite: None.
Registration Information: Co-enrollment in BIOL 443L strongly recommended.

BIOL 443L Limnology Lab 2(0-4)
Spring, Even.
Limnology Lab.
Prerequisite: None.
Corequisite: BIOL 443.
Registration Information: None.

BIOL 448 Biological Statistics 3(3-0)
As Needed.
This course is an undergraduate class stacked from an already approved graduate course, BIOL 548.
Prerequisite: MATH 156.
Corequisite: None.
Registration Information: None.

BIOL 452 Advanced Microscopy 2(2-0)
As Needed.
Theory and application of microscopy to the biological sciences. Includes preparation of cells and tissues for examination, scope, operation, and image analysis.
Prerequisite: None.
Corequisite: BIOL 452L.
Registration Information: Strongly recommend BIOL 301 and 301L as prerequisites.

BIOL 452L Advanced Microscopy Lab 2(0-4)
As Needed.
Advanced Microscopy Lab.
Prerequisite: None.
Corequisite: BIOL 452.
Registration Information: Strongly recommend BIOL 301 and 301L as prerequisites.

BIOL 453 Ecology 2(2-0)
Fall, Even.
Interrelationships among organisms and their environment, employing quantitative methods and conceptual models.
Prerequisite: None.
Corequisite: BIOL 453L.
Registration Information: Strongly recommended BIOL 352, and MATH 126 and MATH 221 as prerequisites.

BIOL 453L Ecology Field Studies 2(0-4)
Fall, Even.
Ecology Field Studies.
Prerequisite: None.
Corequisite: BIOL 453.
Registration Information: None.

BIOL 454 Behavioral Ecology 3(3-0)
Fall, Odd.
Evolution and adaptive significance of animal behaviors with a focus on current research.
Prerequisite: BIOL 202.
Corequisite: None.
Registration Information: None.

BIOL 460 Survey of Genomics & Bioinformatics 3(3-0)
As Needed.
Theory and practice of genome analysis including use of statistics, databases and biomolecular sequence analysis software.
Prerequisite: BIOL 351.
Corequisite: None.
Registration Information: None.

BIOL 461 Applied Geospatial Technology (GIS/GPS) 3(2-2)
Fall, Odd.
Theory and practice of using Geographic Information Systems (GIS) and Global Positioning Systems (GPS) for geographic data analysis, and to georeference data.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing.

BIOL 462 Environmental Policy & Management 3(3-0)
Spring, Odd.
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.
Corequisite: None.
Registration Information: None.

BIOL 465 Environmental Toxicology 3(3-0)
Fall, Even.
Basic principles of toxicology, interaction of xenobiotics with living organisms and the environment, and the impact of pollutants on the ecosystem.
Prerequisite: BIOL 181 and BIOL 181L and BIOL 182 and BIOL 182L.
Corequisite: None.
Registration Information: CHEM 302 and CHEM 302L strongly recommended as prerequisite.

BIOL 473 Med. Tech. Clinical Rotation I 12(5-14)
As Needed.
Coursework and clinical training in an affiliated medical laboratory sciences facility. Specific course of study determined by facility.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

BIOL 474 Med. Tech. Clinical Rotation II 12(5-14)
As Needed.
Coursework and clinical training in an affiliated medical laboratory sciences facility. Specific course of study determined by facility.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

BIOL 475 Med. Tech. Clinical Rotation III 6(3-6)
As Needed.
Coursework and clinical training in an affiliated medical laboratory sciences facility. Specific course of study determined by facility.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

BIOL 479 Ichthyology 2(2-0)
Fall, Odd.
The morphology, taxonomy and ecology of fishes; an introduction to fishery biology and aquaculture.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 479L.

BIOL 479L Ichthyology Laboratory 1(0-2)
Fall, Odd.
Ichthyology Laboratory.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 479.

BIOL 481 Entomology 2(2-0)
Fall, Odd.
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 and BIOL 202L.
Corequisite: BIOL 481L.
Registration Information: None.

BIOL 481L Entomology Lab 1(0-2)
Fall, Odd.
Entomology Lab.
Prerequisite: None.
Corequisite: BIOL 481.
Registration Information: None.

BIOL 482 Herpetology 2(2-0)
Fall, Even.
Diversity, anatomy, physiology, evolution, and ecology of reptiles of amphibians. Emphasis will be placed on novel evolutionary adaptations within the major taxa.
Prerequisite: BIOL 202 and BIOL 202L.
Corequisite: BIOL 482L.
Registration Information: None.

BIOL 482L Herpetology Lab 1(0-2)
Fall, Even.
Herpetology Lab.
Prerequisite: BIOL 202 and BIOL 202L.
Corequisite: BIOL 482.
Registration Information: None.

BIOL 483 Mammalogy 2(2-0)
Spring, Even.
Evolution, classification and biology of mammals; practice in identifying and preparing specimens.
Prerequisite: BIOL 202.
Corequisite: BIOL 483L.
Registration Information: None.

BIOL 483L Mammalogy Lab 1(0-2)
Spring, Even.
Mammalogy Lab.
Prerequisite: BIOL 202.
Corequisite: BIOL 483.
Registration Information: None.

BIOL 484 Ornithology 2(2-0)
Spring, Odd.
Classification, life history, laboratory and field identification of birds.
Prerequisite: BIOL 202.
Corequisite: BIOL 484L.
Registration Information: None.

BIOL 484L Ornithology Lab 1(0-2)
Spring, Odd.
Ornithology Lab.
Prerequisite: BIOL 202.
Corequisite: BIOL 484.
Registration Information: None.

BIOL 485 Plant Taxonomy 2(2-0)
As Needed.
Identification of the common vascular plant families of Colorado with an emphasis on the flowering plants; study of their systematic relationships.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommended BIOL 201 and 201L as prerequisite. Recommend co-enrollment in BIOL 485L.

BIOL 485L Plant Taxonomy Lab 2(0-4)
As Needed.
Plant Taxonomy Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend BIOL 201 and 201L as prerequisite. Recommend co-enrollment in BIOL 485.

BIOL 486 Field Botany 3(3-0)
As Needed.
Principles and applications of field techniques used in vegetation assessment, surveys, and vegetation monitoring.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommended BIOL 201 and BIOL 201L.

BIOL 491 Special Topics (1-4 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

BIOL 492 Research 1(0-4-6)
Fall, Spring, Summer.
Faculty directed research project for undergraduate student.
Prerequisite: None.
Corequisite: None.
Registration Information: Students must have either taken 1 credit of BIOL 292, equivalent research experience (e.g. CBASE/Discovery Scholars, research at a different school, REUs, etc.), or have junior/senior standing. Approval of research faculty required. Repeatable (3).

BIOL 493 Seminar 1(1-0)
As Needed.
Seminar for majors and minors concerning unique, current, or unusual topics in biology. Speakers may include guests, faculty, or students.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Completion of Biology core.

BIOL 494 Field Experience (1-4 V)
As Needed.
Volunteer work experience under program director, program coordinator and faculty supervisor.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

BIOL 495 Independent Study (1-4 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing. Permission of instructor. Repeatable (99).

BIOL 498 Internship (5-15 V)
As Needed.
Work experience in the Biology discipline under the combined supervision of the selected organization and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

BIOL 501 Microbiology 3(3-0)
Fall, Spring.
Introduction to the bacteria and viruses, including microbial genetics and physiology.
Prerequisites: BIOL 182 and BIOL 182L and CHEM 301 and CHEM 301L.
Corequisites: BIOL 501L.
Registration Information: None.

BIOL 501L Microbiology Laboratory 1(0-3)
Fall, Spring.
General Microbiology Laboratory. Prerequisites: BIOL 182 and BIOL 182L and CHEM 301 CHEM 301L.
Corequisites: BIOL 501.
Registration Information: None.

BIOL 502 Immunology 3(3-0)
Spring.
Cellular and molecular interactions and principles of innate and adaptive immunity including immune disorders, hypersensitivity, autoimmunity, infections, and cancer.
Prerequisite: BIOL 206 or BIOL 301 or BIOL 302 or BIOL 401 or BIOL 501.
Corequisite: None.
Registration Information: Recommend BIOL 351 as prerequisite.

BIOL 503 Virology 3(3-0)
Fall, Even.
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 BIOL 351.
Corequisite: None.
Registration Information: None.

BIOL 503L Virology Lab 1(0-2)
Fall.
Virology Lab.
Prerequisite: BIOL 301 and BIOL 301L and BIOL 351 and BIOL 503.
Corequisite: None.
Registration Information: Permission of instructor.

BIOL 505 Foundations in Graduate Studies 3(3-0)
As Needed.
Effective sourcing, use, and interpretation of the literature. Scientific methodology, writing, and review of research ethics. Development of a science plan.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MS program.

BIOL 510 (CBC 510) Foundations in Graduate Studies 3(3-0)
Fall.
Effective sourcing, use, and interpretation of the literature. Scientific methodology, writing, and review of research ethics. Development of a science plan.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MS program.

BIOL 512 Advanced Cellular Biology 3(3-0)
Spring.
Advanced investigations of the structural and functional organization of the cell, life cycles of cells, intracellular digestion, protein synthesis and cell death.
Prerequisite: BIOL 301 and BIOL 301L and BIOL 351.
Corequisite: BIOL 512L.
Registration Information: CHEM 302 and CHEM 302L strongly recommended as a prerequisite.

BIOL 512L Advanced Cellular Biology Lab 1(0-3)
Spring.
Advanced Cellular Biology Lab.
Prerequisite: None.
Corequisite: BIOL 512.
Registration Information: None.

BIOL 513 Plant Physiology 2(2-0)
As Needed.
Thorough examination of general physiology and function of plant body systems.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend BIOL 201 and BIOL 201L and CHEM 301 and CHEM 301L as prerequisites. Recommend co-enrollment in BIOL 513L.

BIOL 513L Plant Physiology Lab 2(0-4)
As Needed.
Plant Physiology Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend BIOL 201 and BIOL 201L and CHEM 301 and CHEM 301L as prerequisites. Recommend co-enrollment in BIOL 513L.

BIOL 514 Vertebrate Physiology 3(3-0)
Fall.
General physiology and the functions of animal and human body systems.
Prerequisite: BIOL 202 and BIOL 202L.
Corequisite: None.
Registration Information: Strongly recommend CHEM 301 and CHEM 301L and MATH 159 as prerequisites. Recommend co-enrollment in BIOL 514L.

BIOL 514L Vertebrate Physiology Lab 1(0-1)
Fall.
Vertebrate Physiology Lab.
Prerequisite: BIOL 202 and BIOL 202L.
Corequisite: None.
Registration Information: CHEM 301 and CHEM 301L and MATH 156 are strongly recommended as prerequisites. Recommended co-enrollment in BIOL 514.

BIOL 515 Medical Physiology 3(3-0)
Fall.
Medical physiology focusing on human body systems and their regulation, disorders, diagnosis, and treatments. Includes circulatory, respiratory, endocrine, nervous, muscular, digestive, reproductive, and urinary.
Prerequisites: BIOL 202 and BIOL 202L and CHEM 301 and CHEM 301L.
Corequisites: None.
Registration Information: Graduate level standing.

BIOL 521 Histology 2(2-0)
Spring, Odd.
A microscopic study of vertebrate tissues and organs.
Prerequisite: None.
Corequisite: BIOL 521L.
Registration Information: None.

BIOL 521L Histology Lab 2(0-4)
Spring, Odd.
Histology Lab.
Prerequisite: None.
Corequisite: BIOL 521.
Registration Information: None.

BIOL 522 Neurobiology 3(3-0)
Spring, Even.
Fundamentals of neuroscience, cellular and molecular signaling in the nervous system, electrophysiological properties of neurons, sensory and motor systems, and cellular mechanisms of cognition.
Prerequisite: BIOL 351.
Corequisite: None.
Registration Information: None.

BIOL 532 Developmental Biology 2(2-0)
As Needed.
Theory and principles of the development of representative vertebrate and invertebrate animals, with particular emphasis on the frog, chick, and Drosophila.
Prerequisite: BIOL 351.
Corequisite: BIOL 532L.
Registration Information: None.

BIOL 532L Developmental Biology Lab 2(0-4)
As Needed.
Developmental Biology Lab.
Prerequisite: None.
Corequisite: BIOL 532.
Registration Information: None.

BIOL 540 Advanced Biotechniques 2(2-0)
Fall, Odd.
Advanced lab covering cellular/molecular techniques and instrumentation. May include Flow cytometry, advanced microscopy, molecular cloning, CRISPR, Western blots, quantitative PCR, and next generation sequencing.
Prerequisite: BIOL 301 and BIOL 301L and BIOL 351.
Corequisite: BIOL 540L.
Registration Information: None.

BIOL 540L Advanced Biotechniques Lab 2(0-2)
Fall, Odd.
Advanced laboratory-based class covering important cellular/molecular techniques and instruments. Topics include Flow cytometry, Advanced Microscopy, Molecular Cloning, CRISPR, Western Blots, and Quantitative PC.
+ Prerequisite: BIOL 301 and BIOL 301L and BIOL 351.
Corequisite: BIOL 540.
Registration Information: None.

BIOL 541 Freshwater Invertebrate Zoology 2(2-0)
Spring, Odd.
Classification, phylogeny, systematics, morphology, physiology, and natural history of freshwater invertebrates inclusive of insects.
Prerequisite: None.
Corequisite: BIOL 541L.
Registration Information: Recommend BIOL 202 and BIOL 202L as prerequisites.

BIOL 541L Freshwater Invertebrate Zoology Lab 2(0-4)
Spring, Odd.
Freshwater Invertebrate Zoology Lab.
Prerequisite: None.
Corequisite: BIOL 541.
Registration Information: Recommend BIOL 202 and BIOL 202L as prerequisites.

BIOL 543 Limnology 2(2-0)
Spring, Even.
Biology, chemistry, and physics of lakes and rivers.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BIOL 543L Limnology Lab 2(0-4)
Spring, Even.
Limnology Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BIOL 548 Biological Statistics 3(3-0)
As Needed.
Basic statistical methods necessary to understand, evaluate, analyze and interpret scientific literature and experimental results.
Prerequisite: MATH 156.
Corequisite: None.
Registration Information: None.

BIOL 552 Advanced Microscopy 2(2-0)
As Needed.
Theory and application of microscopy to the biological sciences. Includes preparation of cells and tissues for examination, scope operation, and image analysis.
Prerequisite: None.
Corequisite: BIOL 552L.
Registration Information: None.

BIOL 552L Advanced Microscopy Lab 2(0-4)
As Needed.
Advanced Microscopy Lab.
Prerequisite: None.
Corequisite: BIOL 552.
Registration Information: None.

BIOL 553 Ecology 2(2-0)
Fall, Even.
Interrelationships among organisms and their environment, employing quantitative methods and conceptual models.
Prerequisite: None.
Corequisite: BIOL 553L.
Registration Information: Recommend BIOL 352 as prerequisite.

BIOL 553L Ecology Field Studies 2(0-4)
Fall, Even.
Ecology Field Studies.
Prerequisite: None.
Corequisite: BIOL 553.
Registration Information: None.

BIOL 554 Behavioral Ecology 3(3-0)
Fall, Odd.
Evolution and adaptive significance of animal behaviors with a focus on current research.
Prerequisite: None.
Corequisite: None.
Registration Information: BIOL 202 recommended as prerequisite.

BIOL 559 Comprehensive Exam 1(1-0)
As Needed.
Preparation and administration of comprehensive exam for degree completion.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of director.

BIOL 560 Survey of Genomics & Bioinformatics 3(3-0)
As Needed.
Theory and practice of genome analysis including use of statistics, databases and biomolecular sequence analysis software.
Prerequisite: BIOL 351.
Corequisite: None.
Registration Information: None.

BIOL 561 Applied Geospatial Technology (GIS/GPS) 3(2-2)
Fall, Odd.
Theory and practice of using Geographic Information Systems (GIS) and Global Positioning Systems (GPS) for geographic data analysis, and to georeference data.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BIOL 562 Environmental Policy & Management 3(3-0)
Spring, Odd.
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.
Corequisite: None.
Registration Information: None.

BIOL 565 Environmental Toxicology 3(3-0)
Fall, Even.
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 and BIOL 181L and BIOL 182 and BIOL 182L.
Corequisite: None.
Registration Information: CHEM 302 and 302L is strongly strongly recommended as prerequisite.

BIOL 568 Evolution 3(3-0)
As Needed.
Overview of the basic concepts in evolutionary biology with focus on patterns and processes through the use of molecular and organismal examples.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BIOL 577 Current Issues in Biology (1 V)
As Needed.
Discussion of presentations by student and faculty speakers, primary literature, and TED Talks related to a number of biological research areas.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (3).

BIOL 578 Practicum in Laboratory Instruction 1(0-2)
Fall, Spring.
Laboratory preparation, instruction, and methods under the guidance and supervision of a professor.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of program director and chair. Repeatable (4).

BIOL 579 Ichthyology 2(2-0)
Fall, Odd.
The morphology, taxonomy and ecology of fishes; an introduction to fishery biology and aquaculture.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 579L.

BIOL 579L Ichthyology Laboratory 1(0-2)
Fall, Odd.
Ichthyology Laboratory.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 479.

BIOL 581 Entomology 2(2-0)
Fall, Odd.
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 and BIOL 202L.
Corequisite: BIOL 581L.
Registration Information: None.

BIOL 581L Entomology Lab 1(0-2)
Fall, Odd.
Entomology Lab.
Prerequisite: None.
Corequisite: BIOL 581.
Registration Information: None.

BIOL 582 Herpetology 2(2-0)
Fall, Even.
Diversity, anatomy, physiology, evolution, and ecology of reptiles of amphibians. Emphasis will be placed on novel evolutionary adaptations within the major taxa.
Prerequisite: None.
Corequisite: BIOL 582L.
Registration Information: None.

BIOL 582L Herpetology Lab 1(0-2)
Fall, Even.
Herpetology Lab.
Prerequisite: None.
Corequisite: BIOL 582.
Registration Information: None.

BIOL 583 Mammalogy 2(2-0)
Spring, Even.
Evolution, classification and biology of mammals; practice in identifying and preparing specimens.
Prerequisite: None.
Corequisite: BIOL 583L.
Registration Information: None.

BIOL 583L Mammalogy Lab 1(0-2)
Spring, Even.
Mammalogy Lab.
Prerequisite: None.
Corequisite: BIOL 583.
Registration Information: None.

BIOL 584 Ornithology 2(2-0)
Spring, Odd.
Classification, life history, laboratory and field identification of birds.
Prerequisite: None.
Corequisite: BIOL 584L.
Registration Information: None.

BIOL 584L Ornithology Lab 1(0-2)
Spring, Odd.
Ornithology Lab.
Prerequisite: None.
Corequisite: BIOL 584.
Registration Information: None.

BIOL 585 Plant Taxonomy 2(2-0)
As Needed.
Identification of common vascular plant families of Colorado with an emphasis on the flowering plants; study of their systematic relationships.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 585L.

BIOL 585L Plant Taxonomy Lab 2(0-4)
As Needed.
Plant Taxonomy Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 585.

BIOL 586 Field Botany 3(3-0)
As Needed.
Principles and applications of field techniques used in vegetation assessment, surveys, and vegetation monitoring.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommended prerequisite of BIOL 201 and 201L.

BIOL 588 Internship Seminar 1(1-0)
As Needed.
Graduate internship presentation and examination for completion of MS degree option within the Graduate Programs in Natural Sciences.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

BIOL 589 Thesis Defense 1(1-0)
As Needed.
Thesis presentation for completion of MS degree option within the Graduate Programs in Natural Sciences.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

BIOL 591 Special Topics (1-4 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

BIOL 592 Research (1-6 V)
As Needed.
Faculty directed research project for graduate students.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Approval of department chair or program director. Repeatable (99).

BIOL 593 (CBC 593, CHEM 593) Seminar 1(1-0)
As Needed.
An interdisciplinary seminar on topics appropriate to the application of natural sciences.
Prerequisite: BIOL 510 or CBC 510 or CHEM 510.
Corequisite: None.
Registration Information: Admission to MS program.

BIOL 595 Independent Study (1-4 V)
As Needed.
Independent Study
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor and department chair.

BIOL 598 Internship (1-4 V)
As Needed.
Volunteer or paid work experience under the combined supervision of the selected organization and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

BIOL 599 Thesis Research (1-6 V)
As Needed.
Continued enrollment is dependent upon satisfactory progress in thesis work.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Approval of department chair. Repeatable (6).

Geology (GEOL)

GEOL 101 Earth Science (GT-SC2) 3(3-0)
Fall, Spring.
Four earth spheres: the hydrosphere (oceanography, hydrologic cycle); the atmosphere (meteorology and climatology); the lithosphere (geology; internal and external processes); and space are emphasized.
Prerequisite: None.
Corequisite: None.
Registration Information: Co-enrollment in GEOL 101L strongly recommended.
(Gen Ed: ST, GT-SC2)

GEOL 101L Earth Science Lab (GT-SC1) 1(0-2)
Fall, Spring.
Lab to accompany GEOL 101 lecture.
Prerequisite: None.
Corequisite: None.
Registration Information: Co-enrollment in GEOL 101 strongly recommended.
(Gen Ed: ST, GT-SC1)

GEOL 114 Oceanography 3(3-0)
As Needed.
Study of world oceans and their role in the Earth system, including chemical, physical, geological, meteorological and biological aspects of the sea.
Prerequisite: None.
Corequisite: None.
Registration Information: Co-enrollment in GEOL 114L strongly recommended.
(Gen Ed: ST)

GEOL 114L Oceanography Lab 1(0-2)
As Needed.
Lab to accompany GEOL 114 lecture.
Prerequisite: None.
Corequisite: None.
Registration Information: Co-enrollment in GEOL 114 strongly recommended.
(Gen Ed: ST)

Wildlife & Natural Resources (WANR)

WANR 291 Special Topics (1 V)
As Needed.
Special Topics in Wildlife.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

WANR 302 Principles of Wildlife Management 3(2-2)
Spring.
Examine wildlife as a natural resource, with emphasis on principles of ecology, and management.
Prerequisite: BIOL 352.
Corequisite: None.
Registration Information: None.

WANR 303 Nat Resource Policy & Admin 3(3-0)
As Needed.
Principles and concepts of public land and resources policy, administrative decision making, and contemporary issues and problems.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 304 Human Dimensions in Nat Res Mgmt 3(3-0)
Fall, Odd.
Science of incorporating human-natural resource relationships with traditional biological sciences information in decision-making processes.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 401 Fisheries Science 2(2-0)
Spring, Even.
Principles and concepts of studying structure and dynamics of fish populations. Topics include estimating abundance, mortality, sustainable harvest levels, appropriate regulations.
Prerequisite: None.
Corequisite: WANR 401L.
Registration Information: None.

WANR 401L Fisheries Science Lab 1(0-2)
Spring, Even.
Principles and concepts of studying structure and dynamics of fish populations. Topics include estimating abundance, mortality, sustainable harvest levels, appropriate regulations.
Prerequisite: None.
Corequisite: WANR 401.
Registration Information: None.

WANR 402 Management of Endangered Species 3(3-0)
As Needed.
Problems and solutions of species endangerment. Political and biological aspects to endangered species. Proactive and reactive maintenance and restoration.
Prerequisite: BIOL 352.
Corequisite: None.
Registration Information: None.

WANR 410 Aquaculture 3(2-2)
Spring, Odd.
Commonly used culture systems, fundamentals of fish and shellfish husbandry, appreciation of aquaculture's roles in natural resource management, the human food supply, and the global economy.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 421 Wildlife Conservation 3(2-2)
Spring, Odd.
Knowledge, theories, and research related to the total environment in which we practice conservation.
Prerequisite: BIOL 352.
Corequisite: None.
Registration Information: None.

WANR 430 Wildlife & Fisheries Techniques 4(0-8)
As Needed.
Covers study design, radio telemetry, passive monitoring techniques, animal capture and handling, population estimation, and quantifying vegetation and habitat usage.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 475 Science Communication 3(3-0)
Fall, Even.
Overview of science communication for STEM students, and employs a variety of practice-based activities to strengthen communication skills.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 485 Wildlife Research Discussion 1(1-0)
Spring.
Discussion of a broad range of topics and current research in Wildlife Biology.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 487 R Code Introduction 1(0-2)
Fall.
Practical issues in R code statistical computing, including programming in R, reading data into R, accessing R packages, writing R functions, debugging, and organizing and commenting R code.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 491 Special Topics (1-4 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

WANR 501 Fisheries Science 2(2-0)
Spring, Even.
Introduction to the structure and functioning of freshwater and marine aquatic ecosystems, including the basic biology and field techniques required to successfully manage fish populations.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 501L Fisheries Science Lab 1(0-2)
Spring, Even.
Hands on opportunities to do fisheries work and techniques.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 502 Management of Endangered Species 3(3-0)
As Needed.
Problems and solutions of species endangerment. Political and biological aspects of endangered species. Proactive and reactive maintenance and restoration.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 510 Aquaculture 3(2-2)
Spring, Odd.
Commonly used culture systems, fundamentals of fish and shellfish husbandry, appreciation of aquaculture's roles in natural resource management, the human food supply, and the global economy.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 521 Wildlife Conservation 3(2-2)
Spring, Odd.
Knowledge, theories, and research related to the total environment in which we practice conservation.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 530 Wildlife & Fisheries Techniques 4(0-8)
As Needed.
Covers study design, radio telemetry, passive monitoring techniques, animal capture and handling, population estimation, and quantifying vegetation and habitat usage.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 575 Science Communication 3(3-0)
Fall, Even.
Overview of science communication for STEM students, and employs a variety of practice-based activities to strengthen communication skills.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 585 Wildlife Research Discussion 1(1-0)
Spring.
Examination of professional wildlife research from presentations, including analysis of their theories, strengths, and weaknesses.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 587 R Code Introduction 1(0-2)
Fall.
Practical issues in R code statistical computing, including programming in R, reading data into R, accessing R packages, writing R functions, debugging, and organizing and commenting R code.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

Biology 3+2 Program, Bachelor of Science/Master of Science

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.

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.

Specific Admission Requirements

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.

Prior to being admitted to the Biology MS 3+2 plan, students must have completed or be in the process of taking the following courses:

Course	Title	Credits
BIOL 301 & 301L	General Microbiology and General Microbiology Lab	5
BIOL 350	Mendelian and Population Genetics	2.00
BIOL 351	Molecular Biology & Genetics	2.00
CHEM 302 & 302L	Organic Chemistry II and Organic Chemistry Lab II	5
PHYS 202 & 202L	Principles Of Physics II (GT-SC2) and Principles Of Physics II Lab (GT-SC1)	4
MATH 156	Introduction to Statistics (GT-MA1)	3-4
or MATH 221	Applied Calc: An Intuitive Approach (GT-MA1)	

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

1. A completed Biology 3+2 online application;
2. A CSU Pueblo transcript;
3. Two letters of recommendation;
4. A letter of support from a CSU-Pueblo Faculty mentor
5. A letter of intent;
6. GRE scores are optional and may be used to supplement the application

Specific Program Requirements

Students in the 3+2 BS/MS program must complete:

- The requirements for a BS in Biology including specific concentration courses.
- The requirements for the MS in Biology including thesis or non-thesis options.

Students may take up to 12 graduate credits in "stacked" (400/500) courses, with the permission of the Biology graduate committee and Program Director.

The 3+2 degree plan has the following requirements:

Course	Title	Credits
General Education [1]		27
BS Biology Core		30
BS Biology Support Courses		32
BS Biology Concentration		19
MS Biology Requirements		30-34
Total Credits		**138-142**

[1] CID 103 and MATH 103 are required general education courses for all Biology majors.

Undergraduate Requirements

Specific Core Requirements

Course	Title	Credits
BIOL 171	First Year Seminar	1
BIOL 181 & 181L	College Biology I/Organismal Bio (GT-SC2) and College Biology I/Organismal Bio Lab (GT-SC1)	4
BIOL 182 & 182L	College Biology II/Cellular Biology (GT-SC2) and College Biology II/Cellular Bio Lab (GT-SC1)	4
BIOL 312 & 312L	Cell Biology and Cell Biology Laboratory	4
BIOL 350	Mendelian and Population Genetics	2
BIOL 351	Molecular Biology & Genetics	3
BIOL 352	Evolutionary Biology and Ecology	3
BIOL 493	Seminar	1
Select one of the following two organismal courses:		4
BIOL 201 & 201L	Botany (GT-SC2) and Botany Laboratory (GT-SC1)	4
BIOL 202 & 202L	Zoology and Zoology Laboratory	4
Select one of the following four microbiology or physiology courses:		4
BIOL 401 & 401L	Microbiology and Microbiology Laboratory	4
BIOL 412 & 412L	Advanced Cellular Biology and Advanced Cellular Biology Lab	4
BIOL 413 & 413L	Plant Physiology and Plant Physiology Lab	4
BIOL 414 & 414L	Vertebrate Physiology and Vertebrate Physiology Lab	4
Total Credits		**30**

Select from the following BS Biology concentrations:

- Basic Biology Concentration (p. 407)
- Biology/Chemistry Double Major Concentration (p. 405)
- Biomedical Sciences Concentration (p. 408)
- Cellular & Molecular Biosciences Concentration (https://catalog.csupueblo.edu/college-of-science-technology-engineering-and-mathematics/biology/biology-bs-cellular-molecular-biosciences-concentration/)
- Environmental Biosciences Concentration (p. 410)
- Secondary Certification Concentration (https://catalog.csupueblo.edu/college-of-science-technology-engineering-and-mathematics/biology/biology-bs-biology-secondary-certification-concentration/)

Graduate Requirements

On Campus Program

Specific Core Requirements

Course	Title	Credits
On campus students will take one of the following courses:		**4**
BIOL 512 & 512L	Advanced Cellular Biology and Advanced Cellular Biology Lab	4
BIOL 514 & 514L	Vertebrate Physiology and Vertebrate Physiology Lab	4
BIOL 540 & 540L	Advanced Biotechniques and Advanced Biotechniques Lab	4
BIOL 543 & 543L	Limnology and Limnology Lab	4
BIOL 553 & 553L	Ecology and Ecology Field Studies	4
Total Credits		**4**

Thesis Option

Course	Title	Credits
BIOL 510	Foundations in Graduate Studies	3
BIOL 589	Thesis Defense	1.00
BIOL 593	Seminar	1
BIOL 599	Thesis Research	6
MATH 550	Statistical Methods	3.00
Electives		12
Total Credits		**26**

Internship Option

Course	Title	Credits
BIOL 510	Foundations in Graduate Studies	3
BIOL 588	Internship Seminar	1.00
BIOL 593	Seminar	1
BIOL 598	Internship	4
MATH 550	Statistical Methods	3.00
Electives		16
Total Credits		**28**

Online Program

Non-Thesis Option

Course	Title	Credits
BIOL 505	Foundations in Graduate Studies	3
BIOL 548	Biological Statistics	3
BIOL 559	Comprehensive Exam	1
BIOL 568	Evolution	3
BIOL 577	Current Issues in Biology	1
Electives		23
Total Credits		**34**

Electives

Elective courses are select from the courses listed below. Others may be used, with permission, as new courses are added or from other areas of student (e.g. CHEM and WANR).

Course	Title	Credits
BIOL 502 & BIOL 503L	Immunology and Virology Lab	4
BIOL 503	Virology	3.00
BIOL 512 & 512L	Advanced Cellular Biology and Advanced Cellular Biology Lab	4
BIOL 513 & 513L	Plant Physiology and Plant Physiology Lab	4
BIOL 514 & 514L	Vertebrate Physiology and Vertebrate Physiology Lab	4
BIOL 521 & 521L	Histology and Histology Lab	4
BIOL 532 & 532L	Developmental Biology and Developmental Biology Lab	4
BIOL 540 & 540L	Advanced Biotechniques and Advanced Biotechniques Lab	4
BIOL 541 & 541L	Freshwater Invertebrate Zoology and Freshwater Invertebrate Zoology Lab	4
BIOL 543 & 543L	Limnology and Limnology Lab	4
BIOL 552 & 552L	Advanced Microscopy and Advanced Microscopy Lab	4
BIOL 553 & 553L	Ecology and Ecology Field Studies	4
BIOL 554	Behavioral Ecology	3.00
BIOL 561	Applied Geospatial Technology (GIS/GPS)	3.0
BIOL 562	Environmental Policy & Management	3.00
BIOL 565	Environmental Toxicology	3.00
BIOL 579 & 579L	Ichthyology and Ichthyology Laboratory	3
BIOL 581 & 581L	Entomology and Entomology Lab	3
BIOL 582 & 582L	Herpetology and Herpetology Lab	3
BIOL 583 & 583L	Mammalogy and Mammalogy Lab	3
BIOL 584 & 584L	Ornithology and Ornithology Lab	3
BIOL 585 & 585L	Plant Taxonomy and Plant Taxonomy Lab	4

BIOL 586	Field Botany	3.00
BIOL 591	Special Topics	1-4
BIOL 595	Independent Study	1-4

Biology, Master of Science

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 in the Biology 3+2 Plan description. The 3+2 plan allows a student to simultaneously receive a BS and an MS degree in five years.

There are three options for MS degrees in Biology. Both the Thesis MS option and the Internship MS option must be completed on campus and only one course per year may be completed online.

Thesis Option

For students interested in biological research, agency jobs, and professional schools where research experience is valued. The thesis option requires successful completion of the on campus core, six semester credits of thesis research (BIOL 599 THESIS RESEARCH (1.00 c.h.)) and an approved thesis, as well as 12 credits of elective coursework. Thesis option students are required to defend their research results before a thesis defense committee.

Internship Option

Designed for students who already have or plan to complete an internship as part of the MS degree. The Internship MS option requires successful completion of the on campus core, four semester credits of Internship, and 16 credits of elective coursework. The program of study for each student must be approved by a graduate committee and the Program Director. A Intern MS 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.

Online Non-Thesis Option

Available for a broad range of career professionals including science teachers requiring graduate coursework and individuals with positions in which an MS in Biology will qualify them for promotion. The Online MS non-thesis option requires completion of the online core and 23 credits of elective coursework. The program of study for each student must be approved by a graduate committee and the Program Director. A online MS non-thesis option student must complete a comprehensive exam.

Specific Admission Requirements

Students applying to the Biology MS Program must have a suggested 3.0 overall GPA and a bachelor's degree in Biology or a similar field.

The application file for admission:

1. A completed Biology MS online application;
2. Official college transcripts;
3. Two letters of recommendation;
4. A letter of support from a CSU-Pueblo Faculty mentor
5. A letter of intent;
6. GRE scores are optional and may be used to supplement the application

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 & 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 Seminar (1 c.h.)) 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.

Specific Program Requirements

Program Overviews

Thesis Option

Course	Title	Credits
Core Requirements		4
Option Requirements		30
Electives		12
Total Credits		**46**

Non-Thesis Option

Specific Core Requirements

On campus students will take one of the following courses:

Course	Title	Credits
BIOL 512 & 512L	Advanced Cellular Biology and Advanced Cellular Biology Lab	4

BIOL 514 & 514L	Vertebrate Physiology and Vertebrate Physiology Lab	4
BIOL 540 & 540L	Advanced Biotechniques and Advanced Biotechniques Lab	4
BIOL 543 & 543L	Limnology and Limnology Lab	4
BIOL 553 & 553L	Ecology and Ecology Field Studies	4

Thesis Option

Course	Title	Credits
Core Requirements		
Core Courses		4
Concentration Core Requirements		
BIOL 510	Foundations in Graduate Studies	3
MATH 550	Statistical Methods	3
BIOL 599	Thesis Research	6
BIOL 593	Seminar	1
BIOL 589	Thesis Defense	1
Elective Courses		
Select 12 credits		12
Total Credits		**30**

Internship Option

Course	Title	Credits
Core Requirements		
Core Courses		4
Concentration Core Requirements		
BIOL 510	Foundations in Graduate Studies	3
MATH 550	Statistical Methods	3
BIOL 593	Seminar	1
BIOL 598	Internship	4
BIOL 588	Internship Seminar	1
Elective Courses		
Select 16 credits		16
Total Credits		**32**

Online Non-Thesis Option

Course	Title	Credits
Online Core Courses		
BIOL 505	Foundations in Graduate Studies	3
BIOL 548	Biological Statistics	3
BIOL 559	Comprehensive Exam	1
BIOL 568	Evolution	3
BIOL 577	Current Issues in Biology (students must take 1cr BIOL 577 three different semesters)	3
Online Elective Courses		
Select 23 credits		23
Total Credits		**36**

Elective Courses

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 or wildlife and natural resources).

Course	Title	Credits
BIOL 502	Immunology	3
BIOL 503 & 503L	Virology and Virology Lab	4
BIOL 512 & 512L	Advanced Cellular Biology and Advanced Cellular Biology Lab	4
BIOL 513 & 513L	Plant Physiology and Plant Physiology Lab	4
BIOL 514 & 514L	Vertebrate Physiology and Vertebrate Physiology Lab	4
BIOL 521 & 521L	Histology and Histology Lab	4
BIOL 532 & 532L	Developmental Biology and Developmental Biology Lab	4
BIOL 540 & 540L	Advanced Biotechniques and Advanced Biotechniques Lab	4
BIOL 541 & 541L	Freshwater Invertebrate Zoology and Freshwater Invertebrate Zoology Lab	4
BIOL 543 & 543L	Limnology and Limnology Lab	4
BIOL 552 & 552L	Advanced Microscopy and Advanced Microscopy Lab	4
BIOL 553 & 553L	Ecology and Ecology Field Studies	4
BIOL 554	Behavioral Ecology	3
BIOL 561	Applied Geospatial Technology (GIS/GPS)	3
BIOL 562	Environmental Policy & Management	3
BIOL 565	Environmental Toxicology	3
BIOL 579 & 579L	Ichthyology and Ichthyology Laboratory	3
BIOL 581 & 581L	Entomology and Entomology Lab	3
BIOL 582 & 582L	Herpetology and Herpetology Lab	3
BIOL 583 & 583L	Mammalogy and Mammalogy Lab	3
BIOL 584 & 584L	Ornithology and Ornithology Lab	3
BIOL 585 & 585L	Plant Taxonomy and Plant Taxonomy Lab	4
BIOL 586	Field Botany	3
BIOL 591	Special Topics	1-4
BIOL 595	Independent Study	1-4

Biology, Minor

Specific Program Requirements

Course	Title	Credits
Select 12 credits in Approved Lower-division Electives		12
Select 8 credits in Approved Upper-division Electives		8
Total Credits		**20**

Biology/Chemistry Double Major, Bachelor of Science

Expected Student Outcomes

- Students will develop a broad-based knowledge of concepts and terminology in molecular, cellular, organismal, and ecological biology.
- Students will develop applied scientific skills though field and laboratory experience and data analysis.
- 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.

Outcomes Assessment Activities

Assessment of students' improvement in intellectual skills, knowledge and capacities from entrance to graduation will be accomplished through the use of several tools. Exams and course assignments will be used as one measure of the student's proficiency in writing skills, acquisition of knowledge, communication, problem solving and laboratory skills. All majors will take a Senior Seminar that requires scientific literature interpretation along with oral and written presentations evaluated by peers and department faculty. Seniors will also take the Biology Major Field Test, which measures Colorado State University Pueblo students' content knowledge and analytical skills against national norms.

Specific Program Requirements

Course	Title	Credits
Biology Core		30
Biology Upper Division		10
Support Courses		21-23
Chemistry Core		40
General Education		21
Total Credits		**122-124**

Specific Core Requirements

Course	Title	Credits
BIOL 171	First Year Seminar	1
BIOL 181 & 181L	College Biology I/Organismal Bio (GT-SC2) and College Biology I/Organismal Bio Lab (GT-SC1)	4
BIOL 182 & 182L	College Biology II/Cellular Biology (GT-SC2) and College Biology II/Cellular Bio Lab (GT-SC1)	4
BIOL 312 & 312L	Cell Biology and Cell Biology Laboratory	4
BIOL 350	Mendelian and Population Genetics	2
BIOL 351	Molecular Biology & Genetics	3
BIOL 352	Evolutionary Biology and Ecology	3
BIOL 493	Seminar	1
Select one of the following two organismal courses:		4
BIOL 201 & 201L	Botany (GT-SC2) and Botany Laboratory (GT-SC1)	4
BIOL 202 & 202L	Zoology and Zoology Laboratory	4
Select one of the following four microbiology or physiology courses:		4
BIOL 401 & 401L	Microbiology and Microbiology Laboratory	4
BIOL 412 & 412L	Advanced Cellular Biology and Advanced Cellular Biology Lab	4
BIOL 413 & 413L	Plant Physiology and Plant Physiology Lab	4
BIOL 414 & 414L	Vertebrate Physiology and Vertebrate Physiology Lab	4
Total Credits		**30**

Specific Concentration Requirements

Course	Title	Credits
Required Biology Core [1]		**30**
BIOL 493 or CHEM 493	Seminar Seminar	1
Required Upper Dvision Biology		**4**
BIOL 401 & 401L	Microbiology and Microbiology Laboratory	4
Advisor Approved Biology Upper Division Electives		**6**
Required Support Courses		**13**
CID 103	Speaking & Listening	3
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
Select one of the following sequences:		**8-10**
Sequence A:		
PHYS 201 & 201L	Principles of Physics I (GT-SC2) and Principles of Physics Lab I (GT-SC1)	4
PHYS 202 & 202L	Principles Of Physics II (GT-SC2) and Principles Of Physics II Lab (GT-SC1)	4
Sequence B:		
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
Chemistry Core		**40**
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
CHEM 301 & 301L	Organic Chemistry I and Organic Chemistry Lab I	5
CHEM 302 & 302L	Organic Chemistry II and Organic Chemistry Lab II	5
CHEM 317 & 317L	Quantitative Analysis and Quantitative Analysis Lab	5
CHEM 321	Physical Chemistry I	3
CHEM 322	Physical Chemistry II	3
CHEM 419 & 419L	Instrumental Analysis and Instrumental Analysis Lab	5
CHEM 420 & 420L	Inorganic Chemistry and Inorganic Chemistry Lab	4
Institutional & General Education		**21**
Total Credits		**122-124**

[1] For the Biology/Chemistry Double Major Concentration, BIOL 493 or CHEM 493 must be taken as part of the core.

Biology: 7-12 Teacher Preparation Concentration, Bachelor of Science

Expected Student Outcomes

- Students will develop a broad-based knowledge of concepts and terminology in molecular, cellular, organismal, and ecological biology.
- Students will develop applied scientific skills though field and laboratory experience and data analysis.
- 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.

Outcomes Assessment Activities

Assessment of students' improvement in intellectual skills, knowledge and capacities from entrance to graduation will be accomplished through the use of several tools. Exams and course assignments will be used as one measure of the student's proficiency in writing skills, acquisition of knowledge, communication, problem solving and laboratory skills. All majors will take a Senior Seminar that requires scientific literature interpretation along with oral and written presentations evaluated by peers and department faculty. Seniors will also take the Biology Major Field Test, which measures Colorado State University Pueblo students' content knowledge and analytical skills against national norms.

Specific Program Requirements

Course	Title	Credits
General Education		24
Biology Required		48
Biology Concentration		19-22
Education Minor		37-40
Total Credits		**128-134**

Specific Concentration Requirements

Students completing a major in Biology with a concentration in Secondary Education are required to complete a minor in Education and meet all other requirements outlined by the Teacher Education Program.

Course	Title	Credits
Required Courses		**48**
BIOL 181 & 181L	College Biology I/Organismal Bio (GT-SC2) and College Biology I/Organismal Bio Lab (GT-SC1)	4
BIOL 182 & 182L	College Biology II/Cellular Biology (GT-SC2) and College Biology II/Cellular Bio Lab (GT-SC1)	4
BIOL 312 & 312L	Cell Biology and Cell Biology Laboratory	4
BIOL 350	Mendelian and Population Genetics	2
BIOL 351	Molecular Biology & Genetics	3
BIOL 352	Evolutionary Biology and Ecology	3
BIOL 378	Laboratory in Teaching Biology	1
BIOL 493	Seminar	1
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
GEOL 101 & 101L	Earth Science (GT-SC2) and Earth Science Lab (GT-SC1)	4
MATH 221	Applied Calc: An Intuitive Approach (GT-MA1)	4
PHYS 201 & 201L	Principles of Physics I (GT-SC2) and Principles of Physics Lab I (GT-SC1)	4
PHYS 202 & 202L	Principles Of Physics II (GT-SC2) and Principles Of Physics II Lab (GT-SC1)	4
Select one of the following:		**4**
BIOL 201 & 201L	Botany (GT-SC2) and Botany Laboratory (GT-SC1)	4
BIOL 202 & 202L	Zoology and Zoology Laboratory	4
Select one of the following:		**4-5**
BIOL 206 & 206L	Introduction to Microbiology and Introduction to Microbiology Lab	4
BIOL 401 & 401L	Microbiology and Microbiology Laboratory	4
Select one of the following:		**4**
BIOL 223 & 223L	Human Physiology and Anatomy I (GT-SC2) and Human Physiology and Anatomy I Lab (GT-SC1)	4
BIOL 224 & 224L	Human Physiology and Anatomy II (GT-SC2) and Human Physiology and Anatomy II Lab (GT-SC1)	4
BIOL 414 & 414L	Vertebrate Physiology and Vertebrate Physiology Lab	4
Select one Biology Upper Division Field Elective/Lab		**3-4**
Select one of the following:		**4-5**
CHEM 211 & 211L	Introduction to Organic Chemistry and Intro to Organic Chemistry Lab	4
CHEM 301 & 301L	Organic Chemistry I and Organic Chemistry Lab I	5
Education Minor		**37-40**
Institutional & General Education Courses	**Must include the following course:**	**24**
CID 103	Speaking & Listening	3
Total Credits		**128-134**

Specific Requirements for the Secondary and K-12 Teaching Endorsements/Minor

The student must complete an appropriate major and the following Education courses:

Course	Title	Credits
Select one of the following:		3
PSYC 151	Human Development (GT-SS3)	3
PSYC 251	Childhood and Adolescence	3
PSYC 342	Educational Psychology	3
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology [2]	3

ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
RDG 435	Disciplinary Literacy [3, 5]	4
Special Methods in Endorsement Areas (Prerequisites - Admission to Education) [5]		4
ED 412	Teaching Diverse Learners [4, 5]	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
or ED 489	Student Teaching K-12	
Total Credits [3]		37-40

[1] Music students may take PSYC 151 Human Development (GT-SS3) (3 c.h.)or PSYC 251 Childhood and Adolescence (3 c.h.).

[2] Music Education students may complete MUS 103 Music and Computer Technology I (1 c.h.) and MUS 306 Technology for Music Educators (2 c.h.) for ED 280 Educational Media and Technology (3 c.h.).

[3] English/Language Arts student must also complete RDG 410 Teaching Reading (3 c.h.)

[4] Physical Education students may complete EPER 465 Adapted Physical Education (3 c.h.) or ED 412 Teaching Diverse Learners (3 c.h.).

[5] GPA of 2.6 required

Biology: Basic Biology Concentration, Bachelor of Science

Expected Student Outcomes

- Students will develop a broad-based knowledge of concepts and terminology in molecular, cellular, organismal, and ecological biology.
- Students will develop applied scientific skills though field and laboratory experience and data analysis.
- 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.

Outcomes Assessment Activities

Assessment of students' improvement in intellectual skills, knowledge and capacities from entrance to graduation will be accomplished through the use of several tools. Exams and course assignments will be used as one measure of the student's proficiency in writing skills, acquisition of knowledge, communication, problem solving and laboratory skills. All majors will take a Senior Seminar that requires scientific literature interpretation along with oral and written presentations evaluated by peers and department faculty. Seniors will also take the Biology Major Field Test, which measures Colorado State University Pueblo students' content knowledge and analytical skills against national norms.

Specific Program 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 (1 c.h.), for graduation with a BS degree in Biology.
- A maximum of 6 semester credit hours of approved upper division CHEM courses may be applied towards approved upper division biology electives.
- A maximum of 6 semester credit hours of approved upper division WANR courses may be applied towards approved upper division biology electives.
- Graduates are encouraged to complete a minor outside the biology department.

Specific Core Requirements

Course	Title	Credits
BIOL 171	First Year Seminar	1
BIOL 181 & 181L	College Biology I/Organismal Bio (GT-SC2) and College Biology I/Organismal Bio Lab (GT-SC1)	4
BIOL 182 & 182L	College Biology II/Cellular Biology (GT-SC2) and College Biology II/Cellular Bio Lab (GT-SC1)	4
BIOL 312 & 312L	Cell Biology and Cell Biology Laboratory	4
BIOL 350	Mendelian and Population Genetics	2
BIOL 351	Molecular Biology & Genetics	3
BIOL 352	Evolutionary Biology and Ecology	3
BIOL 493	Seminar	1
Select one of the following two organismal courses:		4
BIOL 201 & 201L	Botany (GT-SC2) and Botany Laboratory (GT-SC1)	4
BIOL 202 & 202L	Zoology and Zoology Laboratory	4
Select one of the following four microbiology or physiology courses:		4
BIOL 401 & 401L	Microbiology and Microbiology Laboratory	4
BIOL 412 & 412L	Advanced Cellular Biology and Advanced Cellular Biology Lab	4
BIOL 413 & 413L	Plant Physiology and Plant Physiology Lab	4
BIOL 414 & 414L	Vertebrate Physiology and Vertebrate Physiology Lab	4
Total Credits		**30**

Specific Concentration Requirements

Course	Title	Credits
Required Biology Core Courses		
Biology Core Courses		30
Adviser Approved Upper Division Biology Electives		
Select 15 credits		15
Required Support Courses		
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5

CHEM 301 & 301L	Organic Chemistry I and Organic Chemistry Lab I	5
CHEM 302 & 302L	Organic Chemistry II and Organic Chemistry Lab II	5
MATH 156	Introduction to Statistics (GT-MA1)	3
MATH 221	Applied Calc: An Intuitive Approach (GT-MA1)	4
Select one of the following sequences:		8-10
Sequence A:		
PHYS 201 & 201L	Principles of Physics I (GT-SC2) and Principles of Physics Lab I (GT-SC1)	4
PHYS 202 & 202L	Principles Of Physics II (GT-SC2) and Principles Of Physics II Lab (GT-SC1)	4
Sequence B:		
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
CID 103	Speaking & Listening	3
Institutional and General Education		
Select 21 credits		21
General Electives		
Select 14-16 credits		14-16
Total Credits		**118-122**

Biology: Biomedical Sciences Concentration, Bachelor of Science

Expected Student Outcomes

- Students will develop a broad-based knowledge of concepts and terminology in molecular, cellular, organismal, and ecological biology.
- Students will develop applied scientific skills though field and laboratory experience and data analysis.
- 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.

Outcomes Assessment Activities

Assessment of students' improvement in intellectual skills, knowledge and capacities from entrance to graduation will be accomplished through the use of several tools. Exams and course assignments will be used as one measure of the student's proficiency in writing skills, acquisition of knowledge, communication, problem solving and laboratory skills. All majors will take a Senior Seminar that requires scientific literature interpretation along with oral and written presentations evaluated by peers and department faculty. Seniors will also take the Biology Major Field Test, which measures Colorado State University Pueblo students' content knowledge and analytical skills against national norms.

Specific Program Requirements

This concentration includes pre-professional programs: Chiropractic, Dental, Medical, Medical Laboratory Science, Occupational Therapy, Pharmacy, Physical Therapy, Physician Assistant, and Veterinary Medicine.

Course	Title	Credits
General Education		21
BIology Core		30
Biology Upper Division		15
Biology Support Courses		38-40
Open Electives (14-16 credits)		16-14
Total Credits		**120**

Specific Core Requirements

Course	Title	Credits
BIOL 171	First Year Seminar	1
BIOL 181 & 181L	College Biology I/Organismal Bio (GT-SC2) and College Biology I/Organismal Bio Lab (GT-SC1)	4
BIOL 182 & 182L	College Biology II/Cellular Biology (GT-SC2) and College Biology II/Cellular Bio Lab (GT-SC1)	4
BIOL 312 & 312L	Cell Biology and Cell Biology Laboratory	4
BIOL 350	Mendelian and Population Genetics	2
BIOL 351	Molecular Biology & Genetics	3
BIOL 352	Evolutionary Biology and Ecology	3
BIOL 493	Seminar	1
Select one of the following two organismal courses:		4
BIOL 201 & 201L	Botany (GT-SC2) and Botany Laboratory (GT-SC1)	4
BIOL 202 & 202L	Zoology and Zoology Laboratory	4
Select one of the following four microbiology or physiology courses:		4
BIOL 401 & 401L	Microbiology and Microbiology Laboratory	4
BIOL 412 & 412L	Advanced Cellular Biology and Advanced Cellular Biology Lab	4
BIOL 413 & 413L	Plant Physiology and Plant Physiology Lab	4
BIOL 414 & 414L	Vertebrate Physiology and Vertebrate Physiology Lab	4
Total Credits		**30**

Specific Concentration Requirements

Course	Title	Credits
Biology Core		**30**
Biology Upper Division		**15**
BIOL 401 & 401L	Microbiology and Microbiology Laboratory	4
Advisor Approved Upper Division Biology Electives		11
Required Support Courses		**30**
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
CHEM 301 & 301L	Organic Chemistry I and Organic Chemistry Lab I	5
CHEM 302 & 302L	Organic Chemistry II and Organic Chemistry Lab II	5
CID 103	Speaking & Listening	3
Choose one of the following sequences:		**8-10**

Sequence A:		
PHYS 201 & 201L	Principles of Physics I (GT-SC2) and Principles of Physics Lab I (GT-SC1)	4
PHYS 202 & 202L	Principles Of Physics II (GT-SC2) and Principles Of Physics II Lab (GT-SC1)	4
Sequence B:		
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
Institutional & General Education		**21**
Open Electives		**16-14**
Total Credits		**120**

Biology: Cellular & Molecular Biosciences Concentration, Bachelor of Science

Expected Student Outcomes

- Students will develop a broad-based knowledge of concepts and terminology in molecular, cellular, organismal, and ecological biology.
- Students will develop applied scientific skills though field and laboratory experience and data analysis.
- 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.

Outcomes Assessment Activities

Assessment of students' improvement in intellectual skills, knowledge and capacities from entrance to graduation will be accomplished through the use of several tools. Exams and course assignments will be used as one measure of the student's proficiency in writing skills, acquisition of knowledge, communication, problem solving and laboratory skills. All majors will take a Senior Seminar that requires scientific literature interpretation along with oral and written presentations evaluated by peers and department faculty. Seniors will also take the Biology Major Field Test, which measures Colorado State University Pueblo students' content knowledge and analytical skills against national norms.

Specific Program Requirements

Course	Title	Credits
General Education		21
Biology Core		30
Biology Upper Division		15
Biology Support Courses		38-40
Open Electives (14-16 credits)		16-14
Total Credits		**120**

Specific Core Requirements

Course	Title	Credits
BIOL 171	First Year Seminar	1
BIOL 181 & 181L	College Biology I/Organismal Bio (GT-SC2) and College Biology I/Organismal Bio Lab (GT-SC1)	4
BIOL 182 & 182L	College Biology II/Cellular Biology (GT-SC2) and College Biology II/Cellular Bio Lab (GT-SC1)	4
BIOL 312 & 312L	Cell Biology and Cell Biology Laboratory	4
BIOL 350	Mendelian and Population Genetics	2
BIOL 351	Molecular Biology & Genetics	3
BIOL 352	Evolutionary Biology and Ecology	3
BIOL 493	Seminar	1
Select one of the following two organismal courses:		4
BIOL 201 & 201L	Botany (GT-SC2) and Botany Laboratory (GT-SC1)	4
BIOL 202 & 202L	Zoology and Zoology Laboratory	4
Select one of the following four microbiology or physiology courses:		4
BIOL 401 & 401L	Microbiology and Microbiology Laboratory	4
BIOL 412 & 412L	Advanced Cellular Biology and Advanced Cellular Biology Lab	4
BIOL 413 & 413L	Plant Physiology and Plant Physiology Lab	4
BIOL 414 & 414L	Vertebrate Physiology and Vertebrate Physiology Lab	4
Total Credits		**30**

Specific Concentration Requirements

Course	Title	Credits
Required Biology Core Courses		**30**
Required Courses		**9**
BIOL 351L	Molecular Biology & Genetics Laboratory	2
BIOL 401 & 401L	Microbiology and Microbiology Laboratory	4
CHEM 311	Biochemistry Survey	3
or CHEM 411	Biochemistry I	
Advisor Approved Upper Division Biology Electives		**6**
Required Support Courses		**30**
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
CHEM 301 & 301L	Organic Chemistry I and Organic Chemistry Lab I	5
CHEM 302 & 302L	Organic Chemistry II and Organic Chemistry Lab II	5
CID 103	Speaking & Listening	3
MATH 156	Introduction to Statistics (GT-MA1)	3
MATH 221	Applied Calc: An Intuitive Approach (GT-MA1)	4
Select one of the following sequences:		**8-10**
Sequence A:		

PHYS 201 & 201L	Principles of Physics I (GT-SC2) and Principles of Physics Lab I (GT-SC1)	4
PHYS 202 & 202L	Principles Of Physics II (GT-SC2) and Principles Of Physics II Lab (GT-SC1)	4
Sequence B:		
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
Institutional & General Education		**21**
Open Electives (14-16 credits)		**16-14**
Total Credits		**120**

Biology: Environmental Biosciences Concentration, Bachelor of Science

Expected Student Outcomes

- Students will develop a broad-based knowledge of concepts and terminology in molecular, cellular, organismal, and ecological biology.
- Students will develop applied scientific skills though field and laboratory experience and data analysis.
- 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.

Outcomes Assessment Activities

Assessment of students' improvement in intellectual skills, knowledge and capacities from entrance to graduation will be accomplished through the use of several tools. Exams and course assignments will be used as one measure of the student's proficiency in writing skills, acquisition of knowledge, communication, problem solving and laboratory skills. All majors will take a Senior Seminar that requires scientific literature interpretation along with oral and written presentations evaluated by peers and department faculty. Seniors will also take the Biology Major Field Test, which measures Colorado State University Pueblo students' content knowledge and analytical skills against national norms.

Specific Program 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 (1 c.h.), for graduation with a BS degree in Biology.
- A maximum of 6 semester credit hours of approved upper division CHEM courses may be applied towards approved upper division biology electives.
- A maximum of 6 semester credit hours of approved upper division WANR courses may be applied towards approved upper division biology electives.
- Graduates are encouraged to complete a minor outside the biology department.

Specific Core Requirements

Course	Title	Credits
BIOL 171	First Year Seminar	1
BIOL 181 & 181L	College Biology I/Organismal Bio (GT-SC2) and College Biology I/Organismal Bio Lab (GT-SC1)	4
BIOL 182 & 182L	College Biology II/Cellular Biology (GT-SC2) and College Biology II/Cellular Bio Lab (GT-SC1)	4
BIOL 312 & 312L	Cell Biology and Cell Biology Laboratory	4
BIOL 350	Mendelian and Population Genetics	2
BIOL 351	Molecular Biology & Genetics	3
BIOL 352	Evolutionary Biology and Ecology	3
BIOL 493	Seminar	1
Select one of the following two organismal courses:		4
BIOL 201 & 201L	Botany (GT-SC2) and Botany Laboratory (GT-SC1)	4
BIOL 202 & 202L	Zoology and Zoology Laboratory	4
Select one of the following four microbiology or physiology courses:		4
BIOL 401 & 401L	Microbiology and Microbiology Laboratory	4
BIOL 412 & 412L	Advanced Cellular Biology and Advanced Cellular Biology Lab	4
BIOL 413 & 413L	Plant Physiology and Plant Physiology Lab	4
BIOL 414 & 414L	Vertebrate Physiology and Vertebrate Physiology Lab	4
Total Credits		**30**

Specific Concentration Requirements

This concentration includes Pre-Ecology and Pre-Forestry/wildlife.

Course	Title	Credits
Required Biology Core Courses		
Biology Core Courses with both of the following:		34
BIOL 201 & 201L	Botany (GT-SC2) and Botany Laboratory (GT-SC1)	4
BIOL 202 & 202L	Zoology and Zoology Laboratory	4
Adviser Approved Upper Division Biology Electives		
Select at least two Ecology/Environmental courses from the following:		7-8
BIOL 443 & 443L	Limnology and Limnology Lab	4
BIOL 453 & 453L	Ecology and Ecology Field Studies	4
BIOL 454	Behavioral Ecology	3
BIOL 461	Applied Geospatial Technology (GIS/GPS)	3
BIOL 462	Environmental Policy & Management	3
BIOL 465	Environmental Toxicology	3
BIOL 486	Field Botany	3
Select at least one Taxonomy course from the following:		3-4

BIOL 479 & 479L	Ichthyology and Ichthyology Laboratory	3
BIOL 481 & 481L	Entomology and Entomology Lab	3
BIOL 482 & 482L	Herpetology and Herpetology Lab	3
BIOL 483 & 483L	Mammalogy and Mammalogy Lab	3
BIOL 484 & 484L	Ornithology and Ornithology Lab	3
BIOL 485 & 485L	Plant Taxonomy and Plant Taxonomy Lab	4
Required Support Courses		
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
CHEM 301 & 301L	Organic Chemistry I and Organic Chemistry Lab I	5
CHEM 302 & 302L	Organic Chemistry II and Organic Chemistry Lab II	5
MATH 156	Introduction to Statistics (GT-MA1)	3
MATH 221	Applied Calc: An Intuitive Approach (GT-MA1)	4
Select one of the following sequences:		8-10
Sequence A:		
PHYS 201 & 201L	Principles of Physics I (GT-SC2) and Principles of Physics Lab I (GT-SC1)	4
PHYS 202 & 202L	Principles Of Physics II (GT-SC2) and Principles Of Physics II Lab (GT-SC1)	4
Sequence B:		
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
CID 103	Speaking & Listening	3
Institutional and General Education		
Select 21 credits		21
General Electives		
Select 14-16 credits		14-16
Total Credits		**117-123**

Wildlife & Natural Resources: Aquatic Concentration, Bachelor of Science

Wildlife & Natural Resources Program

Majoring Wildlife and Natural Resources leads to a Bachelor of Science (BS) Degree. In addition, supporting courses and general education courses in biology are available to meet a wide range of interests, backgrounds and needs. The Wildlife and Natural Resources Program emphasizes an understanding of fish and wildlife ecology and management with practical skills obtained during laboratory and field exercises. Graduates are prepared for positions with state and federal agencies, tribal departments, conservation organizations, and higher academic degrees. Carefully supervised career planning is provided to all students.

The Wildlife and Natural Resources Program offers Aquatic and Terrestrial concentration areas, with curriculum for each meeting the certification requirements of the American Fisheries Society (AFS) or The Wildlife Society (TWS), respectively.

Program Goals

- To provide students with the necessary background to successfully pursue graduate study towards a professional career in wildlife and natural resources;
- To prepare students upon graduation to enter field positions in government or private industry; and,
- To supply students with the necessary coursework to obtain professional certification as associate fishery or wildlife biologists

Expected Student Outcomes

- Students will know the taxonomy, ecology and natural history of flora and fauna in southern Colorado and the desert southwest.
- Students will know the principles and concepts of fish and wildlife science and how they are used to make informed decisions on difficult management decisions.
- Students will use contemporary tools and techniques for studying fish and wildlife, habitat, and ecosystem processes.
- Students will be familiar with laws, policies, regulations and administrative processes that dictate how wildlife and natural resources are held in trust for the public.
- Students will develop communication and interpersonal skills to enhance their working relations with co-workers, other wildlife professionals, the public and non-governmental organizations, landowners, hunters and anglers, and other natural resources interests.
- 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 process.

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 and field skills. All majors will take a Senior Seminar requiring scientific literature interpretation along with oral and written presentations evaluated by peers and department faculty. Students performing at a high academic level will be strongly encourages to take the Graduate Record Examination (GRE) to prepare for graduate study.

Specific Program Requirements

- Students majoring in wildlife and natural resources must receive a grade of C or better (2.000) in all core biology and wildlife and natural resources courses.
- Students graduating with a BS in wildlife and natural resources must have at least a cumulative GPA of 2.000 in the major area.
- Transfer students are required to earn a minimum of 15 semester credit hours in approved biology and wildlife and natural resources upper division courses from CSU Pueblo, including BIOL 493 Seminar

(1 c.h.), for graduation with a BS degree in wildlife and natural resources.

- Students are strongly encouraged to complete an internship or temporary employment in a natural resources discipline prior to graduation.

Course	Title	Credits
General Education		
CHEM 111 & 111L	Principles of Chemistry (GT-SC2) and Principles of Chemistry Lab (GT-SC1)	4
CHEM 211 & 211L	Introduction to Organic Chemistry and Intro to Organic Chemistry Lab	4
CID 103	Speaking & Listening	3
MATH 156	Introduction to Statistics (GT-MA1)	3
MATH 221	Applied Calc: An Intuitive Approach (GT-MA1)	4
English		6
History		3
Humanities		6
Social Science		6
Major Requirements		
BIOL 171	First Year Seminar	1
BIOL 181 & 181L	College Biology I/Organismal Bio (GT-SC2) and College Biology I/Organismal Bio Lab (GT-SC1)	4
BIOL 182 & 182L	College Biology II/Cellular Biology (GT-SC2) and College Biology II/Cellular Bio Lab (GT-SC1)	4
BIOL 201 & 201L	Botany (GT-SC2) and Botany Laboratory (GT-SC1)	4
BIOL 202 & 202L	Zoology and Zoology Laboratory	4
BIOL 350	Mendelian and Population Genetics	2
BIOL 352	Evolutionary Biology and Ecology	3
BIOL 493	Seminar	1
WANR 303	Nat Resource Policy & Admin	3
WANR 304	Human Dimensions in Nat Res Mgmt	3
WANR 475	Science Communication	3
Select 2 from the following:		6
BIOL 461	Applied Geospatial Technology (GIS/GPS)	3
GEOL 101	Earth Science (GT-SC2)	3
PHYS 201	Principles of Physics I (GT-SC2)	3
Required Electives	**4 credits must be upper division and have advisor approval.**	**25**
BIOL 441 & 441L	Freshwater Invertebrate Zoology and Freshwater Invertebrate Zoology Lab	4
BIOL 443 & 443L	Limnology and Limnology Lab	4
BIOL 453 & 453L	Ecology and Ecology Field Studies	4
BIOL 479 & 479L	Ichthyology and Ichthyology Laboratory	3
WANR 401 & 401L	Fisheries Science and Fisheries Science Lab	3
WANR 410	Aquaculture	3
Open Electives	Must be upper division and have advisor approval.	4
Additional Electives		**14**
Total Credits		**120**

Wildlife & Natural Resources: Terrestrial Concentration, Bachelor of Science

Wildlife & Natural Resources Program

The major of wildlife and natural resources leads to a Bachelor of Science (BS) Degree. In addition, supporting courses and general education courses in biology are available to meet a wide range of interests, backgrounds and needs. The Wildlife and Natural Resources Program emphasizes an understanding of fish and wildlife ecology and management with practical skills obtained during laboratory and field exercises. Graduates are prepared for positions with state and federal agencies, tribal departments, and conservation organizations or higher academic degrees. Carefully supervised career planning is provided to all students.

The wildlife and natural resources program offers Aquatic and Terrestrial concentration areas, with curriculum for each meeting the certification requirements of the American Fisheries Society (AFS) or The Wildlife Society (TWS), respectively.

Program Goals

- To provide students with the necessary background to successfully pursue graduate study towards a professional career in wildlife and natural resources;
- To prepare students upon graduation to enter field positions in government or private industry; and,
- To supply students with the necessary coursework to obtain professional certification as associate fishery or wildlife biologists

Expected Student Outcomes

- Students will know the taxonomy, ecology and natural history of flora and fauna in southern Colorado and the desert southwest.
- Students will know the principles and concepts of fish and wildlife science and how they are used to make informed decisions on difficult management decisions.
- Students will use contemporary tools and techniques for studying fish and wildlife, habitat, and ecosystem processes.
- Students will be familiar with laws, policies, regulations and administrative processes that dictate how wildlife and natural resources are held in trust for the public.
- Students will develop communication and interpersonal skills to enhance their working relations with co-workers, other wildlife professionals, the public and non-governmental organizations, landowners, hunters and anglers, and other natural resources interests.
- 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 process.

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 and field skills. All majors will take a Senior Seminar requiring scientific literature interpretation along with oral and written presentations evaluated by peers and department faculty. Students performing at a high academic level will be strongly encourages to take the Graduate Record Examination (GRE) to prepare for graduate study.

Specific Program Requirements

- Students majoring in wildlife and natural resources must receive a grade of C or better (2.000) in all core biology and wildlife and natural resources courses.
- Students graduating with a BS in wildlife and natural resources must have at least a cumulative GPA of 2.000 in the major area.
- Transfer students are required to earn a minimum of 15 semester credit hours in approved biology and wildlife and natural resources upper division courses from CSU Pueblo, including BIOL 493 Seminar (1 c.h.), for graduation with a BS degree in wildlife and natural resources.
- Students are strongly encouraged to complete an internship or temporary employment in a natural resources discipline prior to graduation.

Course	Title	Credits
General Education		
CHEM 111 & 111L	Principles of Chemistry (GT-SC2) and Principles of Chemistry Lab (GT-SC1)	4
CHEM 211	Introduction to Organic Chemistry	3
CID 103	Speaking & Listening	3
MATH 156	Introduction to Statistics (GT-MA1)	3
MATH 221	Applied Calc: An Intuitive Approach (GT-MA1)	4
English		6
History		3
Humanities		6
Social Science		6
Major Requirements		
BIOL 171	First Year Seminar	1
BIOL 181 & 181L	College Biology I/Organismal Bio (GT-SC2) and College Biology I/Organismal Bio Lab (GT-SC1)	4
BIOL 182 & 182L	College Biology II/Cellular Biology (GT-SC2) and College Biology II/Cellular Bio Lab (GT-SC1)	4
BIOL 201 & 201L	Botany (GT-SC2) and Botany Laboratory (GT-SC1)	4
BIOL 202 & 202L	Zoology and Zoology Laboratory	4
BIOL 352	Evolutionary Biology and Ecology	3
BIOL 448	Biological Statistics	3
BIOL 493	Seminar	1
WANR 302	Principles of Wildlife Management	3
WANR 402	Management of Endangered Species	3
WANR 475	Science Communication	3
Required Electives		
Select 3-6 credits from the following:		3-6
BIOL 461	Applied Geospatial Technology (GIS/GPS)	3
BIOL 453 & 453L	Ecology and Ecology Field Studies	4
BIOL 479 & 479L	Ichthyology and Ichthyology Laboratory	3
Select at least one from the following: Botany		3-4
BIOL 413 & 413L	Plant Physiology and Plant Physiology Lab	4
BIOL 485 & 485L	Plant Taxonomy and Plant Taxonomy Lab	4
BIOL 486	Field Botany	3
Select at least one from the following: Physical Science		4
GEOL 101 & 101L	Earth Science (GT-SC2) and Earth Science Lab (GT-SC1)	4
PHYS 201 & 201L	Principles of Physics I (GT-SC2) and Principles of Physics Lab I (GT-SC1)	4
Select at least two from the following: Policy & Administration		6
BIOL 462	Environmental Policy & Management	3
WANR 303	Nat Resource Policy & Admin	3
WANR 304	Human Dimensions in Nat Res Mgmt	3
Select at least two from the following: Terrestrial Vertebrate		6
BIOL 482 & 482L	Herpetology and Herpetology Lab	3
BIOL 482 & BIOL 483L	Herpetology and Mammalogy Lab	3
BIOL 484 & 484L	Ornithology and Ornithology Lab	3
Select at least one from the following: Zoology		3-5
BIOL 321 & 321L	Comparative Vertebrate Anatomy and Comparative Vertebrate Anatomy Lab	5
BIOL 414 & 414L	Vertebrate Physiology and Vertebrate Physiology Lab	4
BIOL 441 & 441L	Freshwater Invertebrate Zoology and Freshwater Invertebrate Zoology Lab	4
BIOL 454	Behavioral Ecology	3
BIOL 479 & 479L	Ichthyology and Ichthyology Laboratory	3
BIOL 481 & 481L	Entomology and Entomology Lab	3
Additional Electives		**18-24**
Total Credits		**114-126**

Chemistry Department

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 provides 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 concentration 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 concentration.

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.

Graduate Programs in Natural Sciences

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

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 concentration* 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.

Co-Curricular Requirements

Students should experience co-curricular activities which enhance, broaden and reinforce the academic experience; therefore, the faculty support and encourage students to participate in science-related, as well as in general activities such as:

1. Science or chemistry clubs
2. Student government
3. Scientific meetings, seminars, symposia, field trips, tours, etc.
4. Internships
5. Research

Academic Programs

Biochemistry

Graduate Program

- Biochemistry, Master of Science (p. 424)

3+2 Program

- Biochemistry 3+2 Plan, Joint Bachelor of Science/Master of Science (p. 422)

Cannabis Biology & Chemistry

Undergraduate Programs

- Cannabis Biology & Chemistry: Analytical Concentration, Bachelor of Science (p. 430)
- Cannabis Biology & Chemistry: Hemp Agriculture Concentration, Bachelor of Science (p. 430)
- Cannabis Biology & Chemistry: Natural Products Concentration, Bachelor of Science (p. 431)

3+2 Program

- Cannabis Biology & Chemistry 3+2 Plan, Joint Bachelor of Science/Master of Science (p. 426)

Graduate Programs

- Cannabis Biology & Chemistry, Master of Science (p. 427)

Certificates

- Cannabis Biology & Chemistry, Certificate (p. 427)
- Cannabis Biology & Chemistry, Post-Baccalaureate Certificate (p. 429)

Chemistry

Undergraduate Programs

- Chemistry/Biology Double Major, Bachelor of Science (p. 436)
- Chemistry: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 437)
- Chemistry: ACS Certified Concentration, Bachelor of Science (p. 438)
- Chemistry: Basic Chemistry Concentration, Bachelor of Science (p. 439)
- Chemistry: Biochemistry Concentration, Bachelor of Science (p. 440)
- Chemistry: Environmental Chemistry Concentration, Bachelor of Science (p. 442)

Minors

- Chemistry, Minor (p. 435)

3+2 Programs

- Chemistry 3+2 Plan, Joint Bachelor of Science/Master of Science (p. 432)

Graduate Programs

- Chemistry, Master of Science (p. 434)

Cannabis Biology & Chemistry (CBC)

Please note: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

CBC 291 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 292 Research (1-3 V)
Fall, Spring, Summer.
Faculty directed research project for undergraduate first or second-year student.
Prerequisite: None.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor. May be repeated for a maximum of 3.0.

CBC 401 Medicinal Plant Biochemistry 3(3-0)
Spring, Even.
A focus on plants exhibiting important biological functions of therapeutic importance. The course emphasizes the biochemical pathways that produce bioactive molecules.
Prerequisite: CHEM 301.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. BIOL 201 recommended.

CBC 413 Cannabis Physiology & Growth (3 V)
Fall, Odd.
This course is designed to learn fundamental Cannabis biology, biochemistry, and physiology with more advanced concepts relevant to medicinal uses of cannabinoids in human disorders.
Prerequisite: BIOL 201.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

CBC 413L Cannabis Physiology & Growth Lab 1(0-3)
Fall, Odd.
This laboratory course is designed to learn fundamental Cannabis biology, biochemistry, and physiology with more advanced concepts relevant to medicinal uses of cannabinoids in human disorders.
Prerequisite: BIOL 201 and BIOL 201L and BIOL 350, and BIOL 351.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. CBC 413 is strongly recommended as corequisite.

CBC 422 Natural Products Extraction & Analysis (3 V)
Fall, Even.
Theory of bench top and instrumental techniques for the extraction and chemical analysis of natural products from various sources with an emphasis on applications related to cannabis.
Prerequisite: CHEM 419.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 422L Natural Products Extraction & Analysis Lab 1(0-3)
Fall, Even.
Practical applications of bench top and instrumental techniques for the extraction and chemical analysis of natural products from various sources with an emphasis on applications related to cannabis.
Prerequisite: CHEM 419L.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. CBC 422 is strongly recommended as corequisite.

CBC 463 Medicinal Chemistry & Pharmacology (3 V)
Fall, Odd.
The chemical and biological processes related to understanding drug action. Provides an overview of these processes and the art and logic of organic medicinal chemistry properties.
Prerequisite: CBC 401.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 491 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 492 Research (1-3 V)
Fall, Spring, Summer.
Faculty directed research project for undergraduate student.
Prerequisite: None.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 493 Seminar (1 V)
Fall.
Presentation of a formal presentation on research or a current topic in the literature using software-based delivery methods.
Prerequisite: None.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 495 Independent Study (1-7 V)
Fall, Spring, Summer.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 498 Internship (1-6 V)
Fall, Spring, Summer.
Work experience in the discipline under the combined supervision of the selected organization and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 501 Medicinal Plant Biochemistry 3(3-0)
Spring, Even.
Natural products have always contributed extensively towards the development of modern medicine. This course will focus on the plants and their biochemical pathways that produce bioactive molecules.
Prerequisite: CHEM 301.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. BIOL 201 recommended.

CBC 510 (BIOL 510) Foundations in Graduate Studies 3(3-0)
Fall.
Effective sourcing, use, and interpretation of the literature. Scientific methodology, writing, and review of research ethics. Development of a science plan.
Prerequisite: None.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Admission to MS program.

CBC 513 Cannabis Physiology & Growth 3(3-0)
Fall, Odd.
This course is designed to learn fundamental Cannabis biology, biochemistry, physiology, with more advanced concepts relevant to medicinal uses of cannabinoids in human disorders.
Prerequisite: BIOL 201.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

CBC 513L Cannabis Physiology & Growth Lab 1(0-2)
Fall, Odd.
This course is designed to learn fundamental Cannabis biology, biochemistry, physiology, with more advanced concepts relevant to medicinal uses of cannabinoids in human disorders in a laboratory setting.
Prerequisite: BIOL 201 and BIOL 201L.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

CBC 522 Natural Products Extraction & Analysis 3(3-0)
Fall, Even.
This course focuses bench top and instrumental techniques for the extraction and chemical analysis of natural products from various sources.
Prerequisite: CHEM 419.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 522L Natural Products Extraction & Analysis Lab 1(0-2)
Fall, Even.
During this course employ laboratory techniques to extract, cleanup, and qualitatively/quantitatively analyze natural products with an emphasis on cannabis.
Prerequisite: CHEM 419L.
Corequisite: CBC 522.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

CBC 563 Medicinal Chemistry & Pharmacology 3(3-0)
Fall, Odd.
Students are introduced to basic concepts related to the specific disciplines in the pharmaceutical sciences, including pharmacology, pharmaceutics, pharmacokinetics, pharmacogenomics, and medicinal chemistry.
Prerequisite: BIOL 351 or CHEM 411.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

CBC 593 (BIOL 593, CHEM 593) Seminar 1(1-0)
As Needed.
An interdisciplinary seminar on topics appropriate to the application of natural sciences.
Prerequisite: BIOL 510 or CBC 510 or CHEM 510.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Admission to MS program.

Chemistry (CHEM)

CHEM 101 Chemistry and Society (GT-SC2) 3(3-0)
Spring.
Chemistry related to the everyday world. Drugs, food, pollution, pesticides, consumer products, energy, and home health. Principally for non-science majors.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: ST, GT-SC2)

CHEM 101L Chemistry and Society Lab (GT-SC1) 1(0-2)
Spring.
Laboratory is optional. Experiments to exemplify the logical steps of problem solving and explore the physical and chemical world.
Prerequisite: None.
Corequisite: None.
Registration Information: CHEM 101 strongly recommended. as corequisite.
(Gen Ed: ST, GT-SC1)

CHEM 111 Principles of Chemistry (GT-SC2) 3(3-0)
Fall, Spring.
Fundamental laws, theories and principles of chemical reactions. Credit not applicable for chemistry majors or minors.
Prerequisite: MATH 101.
Corequisite: None.
Registration Information: Equivalent math placement score.
(Gen Ed: ST, GT-SC2)

CHEM 111L Principles of Chemistry Lab (GT-SC1) 1(0-2)
Fall, Spring.
Experiments using common chemical equipment and techniques to aid the student in learning what occurs in the chemical laboratory.
Prerequisite: CHEM 111.
Corequisite: None.
Registration Information: None.
(Gen Ed: ST, GT-SC1)

CHEM 121 General Chemistry I (GT-SC2) 4(4-0)
Fall, Spring.
For science, engineering and pre-professional curricula. Atomic theory, chemical bonding, periodic properties, states of matter, reactions, oxidation-reduction, stoichiometry, thermochemistry, inorganic nomenclature.
Prerequisite: CHEM 111 and MATH 120.
Corequisite: None.
Registration Information: One year of high school chemistry strongly recommended. Satisfactory placement score on California Chemistry Diagnostic test may be accepted in place of CHEM 111. Equivalent Accuplacer score may be accepted in place of MATH 120.
(Gen Ed: ST, GT-SC2)

CHEM 121L General Chemistry Lab I (GT-SC1) 1(0-2)
Fall, Spring.
General Chemistry Lab I.
Prerequisite: None.
Corequisite: None.
Registration Information: CHEM 121 is strongly recommended as corequisite.
(Gen Ed: ST, GT-SC1)

CHEM 122 General Chemistry II (GT-SC2) 4(4-0)
Fall, Spring.
Continuation of CHEM 121. Thermodynamics, kinetics, equilibria, nuclear chemistry, electrochemistry, acids and bases, solutions, descriptive inorganic chemistry.
Prerequisite: CHEM 121.
Corequisite: None.
Registration Information: None.
(Gen Ed: ST, GT-SC2)

CHEM 122L General Chemistry Lab II (GT-SC1) 1(0-2)
Fall, Spring.
Laboratory component to CHEM 122.
Prerequisite: CHEM 121L.
Corequisite: None.
Registration Information: CHEM 122 is strongly recommended as corequisite.
(Gen Ed: ST, GT-SC1)

CHEM 125 Environmental Science (GT-SC2) 3(3-0)
Fall.
An overview of terrestrial and aquatic environments, the atmosphere, energy, climate change, and natural resources. Emphasis is placed on sustainability needs and challenges.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: ST, GT-SC2)

CHEM 125L Environmental Science Laboratory (GT-SC1) 1(0-2)
Fall.
Laboratory course to accompany CHEM 125.
Prerequisite: None.
Corequisite: None.
Registration Information: CHEM 125 is strongly recommended as corequisite.
(Gen Ed: ST, GT-SC1)

CHEM 150 (PHYS 150) Elementary Concepts in Phys & Chem 4(3-2)
Spring.
Hands-on standards-based approach to understanding basic concepts of physics and chemistry. Integrated lecture, lab and discussion periods.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance into Teacher Education Program.

CHEM 160 Introduction to Forensic Science (GT-SC2) 3(3-0)
Spring.
Overview of Forensic Science. Crime scene investigation. Evidence collection. Microscopy techniques. Arson analysis. Fingerprints. Serology and DNA use.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: ST, GT-SC2)

CHEM 160L Intro to Forensic Science Lab (GT-SC1) 1(0-2)
Spring.
Overview of Forensic Science Laboratory. Evidence handling and collection. Microscopy techniques. Arson analysis, Fingerprints. DNA fingerprinting.
Prerequisite: None.
Corequisite: None.
Registration Information: CHEM 160 strongly recommended as corequisite.
(Gen Ed: ST, GT-SC1)

CHEM 170 Academic Orientation 0.5(0.5-0)
Fall.
Chemistry majors entering the program are introduced to principles of academic communication and professionalism relevant to freshman year. Chemistry careers, study skills, and academic advisement are also included.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CHEM 211 Introduction to Organic Chemistry 3(3-0)
Fall.
Survey of organic chemistry chemical structure, reactivity and functional groups are presented in context of relevance to society.
Prerequisite: CHEM 111.
Corequisite: None.
Registration Information: None.

CHEM 211L Intro to Organic Chemistry Lab 1(0-3)
Fall.
Survey of organic chemistry laboratory course. Basic organic laboratory techniques and skills, both micro and macro scale are presented.
Prerequisite: None.
Corequisite: None.
Registration Information: CHEM 211 strongly recommended as corequisite.

CHEM 260 Forensic Chemistry I 3(3-0)
As Needed.
Investigation of comparative/visual forensic analysis techniques. Topics include fingerprinting, bloodstain pattern analysis, fiber comparisons, and firearms analysis.
Prerequisite: CHEM 111 or CHEM 121 and CHEM 160.
Corequisite: None.
Registration Information: None.

CHEM 260L Forensic Chemistry I Laboratory 1(0-3)
As Needed.
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 CHEM 121 and CHEM 160 and CHEM 160L.
Corequisite: None.
Registration Information: CHEM 260 is strongly recommended as corequisite.

CHEM 291 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CHEM 292 Research 1-3(1-3-1-3)
Fall, Spring, Summer.
Faculty directed research project for undergraduate first or second-year student.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (3).

CHEM 301 Organic Chemistry I 3(3-0)
Fall, Spring.
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: None.
Registration Information: None.

CHEM 301L Organic Chemistry Lab I 2(0-6)
Fall, Spring.
Organic Chemistry Lab I.
Prerequisite: CHEM 122L.
Corequisite: None.
Registration Information: CHEM 301 strongly recommended as corequisite.

CHEM 302 Organic Chemistry II 3(3-0)
Fall, Spring.
Continuation of CHEM 301.
Prerequisite: CHEM 301.
Corequisite: None.
Registration Information: None.

CHEM 302L Organic Chemistry Lab II 2(0-6)
Fall, Spring.
Organic Chemistry Lab II.
Prerequisite: CHEM 301L.
Corequisite: None.
Registration Information: CHEM 302 strongly recommended as corequisite.

CHEM 311 Biochemistry Survey 3(3-0)
Fall.
Survey of biochemistry. For pre-health professional students. Intermediary metabolism is taught at an intermediate level and in the context of human nutrition and clinical applications.
Prerequisite: CHEM 301.
Corequisite: None.
Registration Information: CHEM 302 strongly recommended as prerequisite.

CHEM 317 Quantitative Analysis 3(3-0)
Fall.
Volumetric and gravimetric analysis integrated with instrumental analysis, both optical and electrometric methods.
Prerequisite: CHEM 122.
Corequisite: None.
Registration Information: None.

CHEM 317L Quantitative Analysis Lab 2(0-6)
Fall.
Quantitative Analysis Lab.
Prerequisite: CHEM 317.
Corequisite: None.
Registration Information: CHEM 317 strongly recommended as corequisite.

CHEM 321 Physical Chemistry I 3(3-0)
Spring.
Chemical thermodynamics, chemical dynamics (kinetics), chemical structure and statistical mechanics.
Prerequisite: CHEM 322.
Corequisite: None.
Registration Information: None.

CHEM 322 Physical Chemistry II 3(3-0)
Fall.
Quantum mechanics, spectroscopy, chemical structure, and statistical mechanics.
Prerequisite: CHEM 122 and MATH 126.
Corequisite: None.
Registration Information: MATH 224 and PHYS 201 or PHYS 221 strongly recommended as corequisite.

CHEM 323 Experimental Physical Chemistry 2(0-4)
Spring.
Laboratory techniques in thermodynamics, chemical equilibria, phase phenomena, kinetics, and spectroscopy.
Prerequisite: CHEM 322.
Corequisite: None.
Registration Information: CHEM 321 is strongly recommended as prerequisite. Permission of instructor.

CHEM 370 Academic Enrichment 0.5(0.5-0)
Spring.
Chemistry majors in the third year of the program and above review principles of academic communication, professionalism, as well as academic progress and skills in relation to industrial/academic career preparation.
Prerequisite: CHEM 170.
Corequisite: None.
Registration Information: Permission of department chair.

CHEM 378 Practicum in Laboratory Instruction 1(0-2)
Fall, Spring.
Laboratory preparation, instruction, safety, and methods under the guidance of an instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (2).

CHEM 389 Scientific Literature Review 1(1-0)
As Needed.
Surveys of both print and web-based chemical and biochemical literature.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: Repeatable (2).

CHEM 401 Advanced Organic Chemistry 3(3-0)
Fall, Even.
Topics of advanced organic chemistry, including organic reactions, mechanisms, natural products, and spectroscopy.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 401L Advanced Organic Chemistry Lab 2(0-4)
Fall, Even.
Laboratory course to accompany CHEM 401. Molecular structure determination by chemical and instrumental methods.
Prerequisite: CHEM 302 and CHEM 302L.
Corequisite: CHEM 401.
Registration Information: Permission of instructor.

CHEM 402 Spectroscopy 3(3-0)
Spring, Even.
An advanced study of topics of spectroscopy focusing on the structure determination of compounds. Emphasis on IR, NMR, MS, and UV-VIS spectroscopies.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: None.

CHEM 403 Polymer Chemistry 3(3-0)
As Needed.
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 and CHEM 302L.
Corequisite: None.
Registration Information: None.

CHEM 411 Biochemistry I 3(3-0)
Fall.
Chemistry of constituents of living matter, including proteins, carbohydrates, nucleic acids and lipids. An introduction to enzymes and coenzymes.
Prerequisite: CHEM 302.
Corequisite: None.
Requisite Information: Permission of instructor.

CHEM 412 Biochemistry II 3(3-0)
Spring.
Continuation of CHEM 411. Intermediary metabolism of carbohydrates, lipids, and amino acids. Bioenergetics.
Prerequisite: CHEM 411 or CHEM 511.
Corequisite: None.
Requisite Information: Permission of instructor.

CHEM 412L Biochemistry II Lab 2(0-6)
As Needed.
Biochemistry II Lab.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: CHEM 412 strongly recommended as corequisite.

CHEM 413 Molecular Basis of Disease 3(3-0)
As Needed.
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 CHEM 511.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 419 Instrumental Analysis 3(3-0)
Spring.
Instrumental techniques in chemical separations, electrochemistry, atomic, and molecular spectroscopy.
Prerequisite: CHEM 317 and CHEM 322.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 419L Instrumental Analysis Lab 2(0-6)
Spring.
Instrumental Analysis Lab.
Prerequisite: CHEM 317 and CHEM 322.
Corequisite: None.
Registration Information: CHEM 419 strongly recommended as corequisite. Permission of instructor.

CHEM 420 Inorganic Chemistry (3 V)
Fall.
A foundations in inorganic chemistry survey course, which includes atomic and molecular structure, symmetry, simple solids, acid-base theory, oxidation-reduction reactions, coordination chemistry, and physical methods.
Prerequisite: CHEM 122.
Corequisite: CHEM 420L.
Registration Information: None.

CHEM 420L Inorganic Chemistry Lab 1(0-3)
Fall.
Inorganic laboratory techniques, inorganic qualitative analysis, synthesis and characterization.
Prerequisite: None.
Corequisite: CHEM 420.
Registration Information: None.

CHEM 421 Advanced Inorganic Chemistry (3 V)
Spring.
Detailed examination of inorganic chemistry with emphasis on symmetry and group theory, chemical bonding and structure, electronic spectroscopy, and reactivity.
Prerequisite: CHEM 322 and CHEM 420.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 425 Environmental Chemistry 3(3-0)
As Needed.
Chemical process in air, water and soil. Air, water analysis and treatment, pollution.
Prerequisite: CHEM 321.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 425L Environmental Chemistry Lab 2(0-4)
As Needed.
Laboratory course to accompany CHEM 425. Explores sampling and laboratory techniques utilized in the analysis of environmental samples or to address environmental issues.
Prerequisite: None.
Corequisite: None.
Registration Information: CHEM 425 strongly recommended as corequisite.

CHEM 431 Advanced Physical Chemistry 3(3-0)
Fall, Odd.
Emphasizes latest developments in applied physical chemistry, including advanced theory, and instrumental and computational applications.
Prerequisite: CHEM 321 and CHEM 322.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 460 Forensic Chemistry II 2(2-0)
As Needed.
Investigation of identification techniques for forensic analysis. Topics include arson, biological fluid and drug identification, and DNA analysis.
Prerequisite: CHEM 260 and CHEM 260L and CHEM 302 and CHEM 302L .
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 460L Forensic Chemistry II Lab 2(0-4)
As Needed.
The laboratory will accompany CHEM 460, Forensic Chemistry II lecture.
Prerequisite: CHEM 260 and CHEM 260L and CHEM 302 and CHEM 302L.
Corequisite: None.
Registration Information: CHEM 460 is strongly recommended as corequisite. Permission of instructor.

CHEM 491 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CHEM 492 Research (1-3 V)
Fall, Spring, Summer.
Faculty directed research project for undergraduate student.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (4).

CHEM 493 Seminar 1(1-0)
Fall.
Presentation of a formal presentation on chemical research or a current topic in the chemical literature using software-based delivery methods.
Prerequisite: CHEM 370.
Corequisite: None.
Registration Information: Repeatable (2).

CHEM 495 Independent Study (1-7 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CHEM 498 Internship (1-6 V)
Fall, Spring, Summer.
Work experience in the chemistry discipline under the combined supervision of the selected organization and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CHEM 501 Advanced Organic Chemistry 3(3-0)
Fall, Even.
Topics of advanced organic chemistry including organic reactions, mechanisms, natural products, spectroscopy, and industrial applications.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 501L Advanced Organic Chemistry Lab 2(0-4)
Fall, Even.
Molecular structure determination by chemical and instrumental methods. Advanced synthetic techniques.
Prerequisite: CHEM 302 and CHEM 302L.
Corequisite: CHEM 501.
Registration Information: Permission of instructor.

CHEM 502 Spectroscopy 3(3-0)
Spring, Even.
An advanced study of topics of spectroscopy focusing on the structure determination of compounds. Emphasis on IR, NMR, MS, and UV-VIS spectroscopies.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: None.

CHEM 503 Polymer Chemistry 3(3-0)
As Needed.
Study of synthetic polymers including synthesis, mechanisms of formation, structure elucidation, reactivity, properties, and industrial application. Biopolymers also will be considered.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 510 (CHEM 593) Foundations in Graduate Studies 3(3-0)
As Needed.
An interdisciplinary seminar on topics appropriate to the application of natural sciences.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

CHEM 511 Biochemistry I 3(3-0)
Fall.
Chemistry of constituents of living matter, including proteins, carbohydrates, nucleic acid and lipids. An introduction to enzymes and coenzymes.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 512 Biochemistry II 3(3-0)
Spring.
Intermediary metabolism of carbohydrates, lipids and amino acids. Bioenergetics.
Prerequisite: CHEM 411 or CHEM 511.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 512L Biochemistry II Lab 2(0-6)
As Needed.
Biochemistry II Lab.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: CHEM 512 strongly recommended as corequisite.

CHEM 513 Molecular Basis of Disease 3(3-0)
As Needed.
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 CHEM 511.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 519 Instrumental Analysis 3(3-0)
Spring.
Instrumental techniques in chemical separations, electro-chemistry, atomic, and molecular spectroscopy.
Prerequisite: CHEM 317 and CHEM 322.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 519L Instrumental Analysis Lab 2(0-6)
Spring.
Instrumental Analysis Lab.
Prerequisite: CHEM 317 and CHEM 322.
Corequisite: None.
Registration Information: CHEM 519 strongly recommended as corequisite. Permission of instructor.

CHEM 521 Advanced Inorganic Chemistry 3(3-0)
Spring.
Structure and bonding, coordination theory, periodic relations, equilibrium, kinetics, thermodynamics, descriptive chemistry, industrial applications.
Prerequisite: CHEM 322 and CHEM 420.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 525 Environmental Chemistry 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 525L Environmental Chemistry Lab 2(0-4)
As Needed.
Laboratory course to accompany CHEM 525. Explores sampling and laboratory techniques utilized in the analysis of environmental samples or to address environmental issues.
Prerequisite: None.
Corequisite: None.
Registration Information: CHEM 525 strongly recommended as corequisite.

CHEM 529 Advanced Analytical Chemistry 3(3-0)
Spring, Even.
Emphasizes latest developments in applied analytical chemistry, including advanced theory, wet chemical methods, and the design and application of advanced instrumentation.
Prerequisite: CHEM 321 and CHEM 419 and CHEM 419L or CHEM 519 and CHEM 519L.
Corequisite: None.
Registration Information: None.

CHEM 531 Advanced Physical Chemistry 3(3-0)
Fall, Odd.
Emphasizes latest developments in applied physical chemistry, including advanced theory, and instrumental and computational applications.
Prerequisite: CHEM 321 and CHEM 322.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 550 Industrial Chemistry 2(2-0)
As Needed.
Econ importance & special characteristics of chem industry. Feedstocks, intermediates, & products. Case studies illistarting various topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CHEM 560 Forensic Chemistry II 2(2-0)
As Needed.
Investigation of identification techniques for forensic analysis. Topics include arson, biological fluid and drug identification, and DNA analysis.
Prerequisite: CHEM 260 and CHEM 260L and CHEM 302 and CHEM 302L.
Corequisite: CHEM 560L.
Registration Information: Permission of instructor.

CHEM 560L Forensic Chemistry II Laboratory 2(0-4)
As Needed.
The laboratory will accompany CHEM 560, Forensic Chemistry II lecture.
Prerequisite: CHEM 260 and CHEM 260L and CHEM 302 and CHEM 302L.
Corequisite: None.
Registration Information: CHEM 560 strongly recommended as corequisite. Permission of instructor.

CHEM 578 Practicum in Laboratory Instruction 1(0-2)
Fall, Spring.
Laboratory preparation, instruction and methods under the guidance and supervision of an instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor. Repeatable (4).

CHEM 580 Graduate Writing in the Sciences 1(1-0)
As Needed.
This one-credit course is designed to help prepare students for the rigors of academic writing at the graduate and professional levels.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CHEM 588 Internship Defense 1(1-0)
Fall, Spring, Summer.
Graduate internship presentation, satisfactory report, and examination for completion of MS degree option within the Graduate Programs in Natural Sciences.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

CHEM 589 Thesis Defense 1(1-0)
Fall, Spring, Summer.
Thesis presentation and satisfactory written thesis for completion of MS degree option within the Graduate Programs in Natural Sciences.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

CHEM 591 Special Topics (1-4 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CHEM 592 Research (1-6 V)
Fall, Spring, Summer.
Faculty directed research project for graduate students.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor. Repeatable (99).

CHEM 593 (BIOL 593, CBC 593) Seminar 1(1-0)
As Needed.
An interdisciplinary seminar on topics appropriate to the application of natural sciences.
Prerequisite: BIOL 510 or CBC 510 or CHEM 510.
Corequisite: None.
Registration Information: Admission to MS program.

CHEM 595 Independent Study (1-4 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CHEM 598 Internship (1-4 V)
Fall, Spring, Summer.
Volunteer or paid work experience under the combined supervision of the selected organization and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor. Repeatable (99).

CHEM 599 Thesis Research (1-6 V)
As Needed.
Thesis Research.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

Biochemistry 3+2 Plan, Joint Bachelor of Science/Master of Science

Biochemistry 3+2 Plan (BS/MS)

A feature of the Biochemistry MS program is the 3+2 plan. This plan gives qualified undergraduate students the opportunity to simultaneously pursue both the Baccalaureate (BS) and Master of Science (MS) degrees. Talented students are thus quickly moved toward expanding their academic and scientific horizons based on individual student's abilities and motivation.

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

catalog. Students are encouraged to enter the program as early as the fall of the junior year but not later than the fall of the senior year.

Specific Admission Requirements

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.

Prior to being admitted to the Biochemistry 3+2 program, students much have completed or be in process of completing the following courses:

Course	Title	Credits
CHEM 121	General Chemistry I (GT-SC2)	4
CHEM 121L	General Chemistry Lab I (GT-SC1)	1
CHEM 122	General Chemistry II (GT-SC2)	4
CHEM 122L	General Chemistry Lab II (GT-SC1)	1
CHEM 301	Organic Chemistry I	3
CHEM 301L	Organic Chemistry Lab I	2
CHEM 302	Organic Chemistry II	3
CHEM 302L	Organic Chemistry Lab II	2
CHEM 311	Biochemistry Survey	3
or CHEM 411	Biochemistry I	
CHEM 317	Quantitative Analysis	3
CHEM 317L	Quantitative Analysis Lab	2
CHEM 321	Physical Chemistry I	3
CHEM 322	Physical Chemistry II	3

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

1. A completed Biochemistry MS application form (online);
2. A letter of intent explaining your expectations and purpose for obtaining the MS in Biochemistry;
3. Current CSU Pueblo transcript documenting an undergraduate GPA or 3.00 overall and 3.25 in chemistry courses; and
4. Three letters of recommendation from CSU Pueblo faculty addressing your qualifications and potential to succeed in the program.

Specific Program Requirements

Students in the 3+2 BS/MS program must complete:

- The requirements for a BS in Biochemistry.
- The requirements for the MS in Biochemistry including thesis or non-thesis options.

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.

The 3+2 degree plan has the following requirements:

Course	Title	Credits
General Education		24
BS Chemistry Core		42
BS Biochemistry Concentration		54
MS Biochemistry		30-32
Total Credits		**150-152**

Undergraduate Requirements

Specific Core Requirements

Course	Title	Credits
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
CHEM 170	Academic Orientation	0.5
CHEM 301 & 301L	Organic Chemistry I and Organic Chemistry Lab I	5
CHEM 302 & 302L	Organic Chemistry II and Organic Chemistry Lab II	5
CHEM 317 & 317L	Quantitative Analysis and Quantitative Analysis Lab	5
CHEM 321	Physical Chemistry I	3
CHEM 322	Physical Chemistry II	3
CHEM 370	Academic Enrichment	0.5
CHEM 419 & 419L	Instrumental Analysis and Instrumental Analysis Lab	5
CHEM 420 & 420L	Inorganic Chemistry and Inorganic Chemistry Lab	4
CHEM 493	Seminar	1
Total Credits		**42**

Specific Concentration Requirements

Course	Title	Credits
CHEM 411	Biochemistry I	3
CHEM 412 & 412L	Biochemistry II and Biochemistry II Lab	5
Electives		**3**
CHEM 492	Research	1-3
CHEM 495	Independent Study	1-7
Other Required Courses		
BIOL 181 & 181L	College Biology I/Organismal Bio (GT-SC2) and College Biology I/Organismal Bio Lab (GT-SC1)	4
BIOL 182 & 182L	College Biology II/Cellular Biology (GT-SC2) and College Biology II/Cellular Bio Lab (GT-SC1)	4
BIOL 301 & 301L	General Microbiology and General Microbiology Lab	5
BIOL 350	Mendelian and Population Genetics	2
BIOL 351 & 351L	Molecular Biology & Genetics and Molecular Biology & Genetics Laboratory	4
BIOL 412 & 412L	Advanced Cellular Biology and Advanced Cellular Biology Lab	4
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
Total Credits		**54**

Graduate 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 credit hours). 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 Seminar (3 c.h.).

Thesis option students are required to defend their research results before their graduate 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 term or in consultation with the program director or department chair. If an examination is failed, the requirement may be satisfied by completing the designated undergraduate coursework in the appropriate subdiscipline, as specified by the program director or department chair, with a minimum grade of "B".Students enrolling into the 3+2 program will be exempt from the requirement to pass qualifying exams if they have completed courses at CSU Pueblo in analytical, biological, inorganic, organic, or physical chemistry with a grade of "B" or better.Students enrolled in the 3+2 program required to pass qualifying exams will schedule the exams in consultation with the Program Director.

Course	Title	Credits
Select three of the following:		**9**
CHEM 501	Advanced Organic Chemistry	3
CHEM 511	Biochemistry I	3
or CHEM 512	Biochemistry II	
CHEM 521	Advanced Inorganic Chemistry	3
CHEM 529	Advanced Analytical Chemistry	3
CHEM 531	Advanced Physical Chemistry	3
Total Credits		**9**

Plan A (Thesis Option)

Course	Title	Credits
Thesis Option Courses		**11**
CHEM 510	Foundations in Graduate Studies	3
CHEM 589	Thesis Defense	1
CHEM 593	Seminar	1
CHEM 599	Thesis Research	6
Electives		**10**
Total Credits		**21**

Plan B (Non-Thesis Option)

Course	Title	Credits
Non-Thesis Option Courses		**9**
CHEM 510	Foundations in Graduate Studies	3
CHEM 588	Internship Defense	1
CHEM 593	Seminar	1
CHEM 598	Internship	4
Electives		**14**
Total Credits		**23**

Electives

Elective courses may be selected from the following or others may be added with permission of the Graduate Committee.

Course	Title	Credits
CHEM 501 & 501L	Advanced Organic Chemistry and Advanced Organic Chemistry Lab	5
CHEM 503	Polymer Chemistry	3
CHEM 511	Biochemistry I	3
CHEM 512 & 512L	Biochemistry II and Biochemistry II Lab	5
CHEM 519 & 519L	Instrumental Analysis and 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	1-6
CHEM 595	Independent Study	1-4

Biochemistry, Master of Science

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

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

The Master of Science in Biochemistry requires a minimum of 30 semester credit hours of approved graduate course work and a thesis.

Specific Admission Requirements

Admission to the Biochemistry MS program is in accordance with Colorado State University Pueblo and the Department of Chemistry requirements for master's programs as specified in the University's Catalog. The application file for admission to the Biochemistry MS program must include:

1. A completed Biochemistry MS application form (online);
2. A letter of intent explaining your expectations and purpose for obtaining the MS in Biochemistry;
3. Transcript(s) documenting an undergraduate GPA of 3.000 or higher;

4. Three letters of recommendation from faculty addressing the student's qualifications and potential to succeed in the program; and
5. An interview (in-person or remote) with graduate faculty of the Chemistry Department or Chemistry and Biology Departments, and the Chemistry / Biochemistry MS Program Director.

GRE scores are optional and may be used to supplement your application.

Expected Student Learning Outcomes

Upon completion of the Biochemistry MS or BS/MS, students will:

- Evaluate the scientific literature and use it in their courses and their research.
- 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; propose appropriate experimental design; and effectively employ the scientific method.
- Actively engage in research/internships and discourse with the faculty in the Chemistry and Biology Departments and other STEM disciplines.
- Disseminate, in collaboration with faculty, the products of the Biochemistry-MS program within the CSU Pueblo community and with communities outside of the University in activities using their professional expertise.

Outcomes Assessment Activities

The faculty will use a variety of methods for evaluating student learning outcomes. These include required student enrollment in CHEM 510 Foundations in Graduate Studies (3 c.h.), 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 Seminar (1 c.h.)) that will be evaluated by cognizant faculty members. A written research thesis will be publicly presented and defended by students to demonstrate proficiency in their area of study and this will be evaluated by the student's Graduate Advisory Committee. Students will collaborate with faculty to present the results of their thesis research within the greater Southern Colorado region, give seminars/posters on campus or at appropriate scientific meetings, publish the results of their research in peer reviewed scientific journals, or disseminate information through other appropriate media.

Specific Program Requirements

The course of study requires 11 semester credits of course work common to all students, and 6 credits of thesis research. Each student must complete 4 core courses (13 credit hours). Students are required to complete 6 additional credit hours of approved graduate level electives in Biology, Chemistry, Math, or Engineering as outlined in the graduation plan developed with the student's advisor and graduate committee and approved by the Program Director. The signed graduation plan may be completed at any time, but is a requirement for successful completion of CHEM 510. Students are required to defend their research results before their graduate committee.

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

Biochemistry program requirements are summarized as follows:

Thesis Option Only

Course	Title	Credits
Required Courses		
CHEM 510	Foundations in Graduate Studies	3
CHEM 589	Thesis Defense	1
CHEM 593	Seminar	1
CHEM 599	Thesis Research [1]	6
Core Courses		
CHEM 512	Biochemistry II [2]	3
BIOL 512	Advanced Cellular Biology [2]	3
BIOL 540 & 540L	Advanced Biotechniques and Advanced Biotechniques Lab	4
CHEM 531	Advanced Physical Chemistry	3
Elective Courses		
Select 6 credits		6
Total Credits		**30**

[1] Students may enroll for a total of 6 credit hours of CHEM 599 Thesis Research (1-6 c.h.).
[2] Labs are not required.

Electives

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

Course	Title	Credits
BIOL 502	Immunology	3
BIOL 503	Virology	3
BIOL 552 & 552L	Advanced Microscopy and Advanced Microscopy Lab	4
CHEM 501 & 501L	Advanced Organic Chemistry and Advanced Organic Chemistry Lab	5
CHEM 513	Molecular Basis of Disease	3
CHEM 519 & 519L	Instrumental Analysis and Instrumental Analysis Lab	5
CHEM 521	Advanced Inorganic Chemistry	3
CHEM 525	Environmental Chemistry	3
CHEM 529	Advanced Analytical Chemistry	3
CHEM 591	Special Topics	1-4

CHEM 592	Research	1-6
MATH 550	Statistical Methods	3

Cannabis Biology & Chemistry 3+2 Plan, Joint Bachelor of Science/ Master of Science

The 3+2 Plan is available to the highest performing students who desire to complete a graduate degree in conjunction with their undergraduate degree. The 3+2 Plan allows students to satisfy some of the Bachelor of Science requirements with graduate level coursework. This allows students to complete the two degrees in shorter time than doing the degrees consecutively. Please see the CBC-BS and the CBC-MS programs in the catalog for SLOs specific to the degrees.

Specific Admission Requirements

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, biology, and CBC courses.

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

1. A completed Cannabis Biology and Chemistry MS application form;
2. A letter of intent explaining your expectations and purpose for obtaining the MS in CBC;
3. A CSU Pueblo transcript documenting an undergraduate GPA of 3.000 or higher;
4. Three letters of recommendation addressing the student's qualifications and aptitude to succeed in the program; and
5. An interview with graduate faculty of the Chemistry Department and Biology Department, and the Chemistry / Biochemistry / CBC MS Program Director.

Specific Program Requirements

Students in the 3+2 BS-CBC/MS-CBC program must complete:

- The requirements for a BS in Cannabis Biology & Chemistry including specific concentration courses.
- The requirements for the MS in Chemistry including thesis or non-thesis options.

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.

The 3+2 degree plan has the following requirements:

Course	Title	Credits
General Education		24
BS Cannabis Biology & Chemistry Core		46
CBC Concentration		38-53
MS Cannabis Biology & Chemistry Core		21
MS General Electives		9
Total Credits		**138-153**

Undergraduate Requirements

Specific Core Requirements

Course	Title	Credits
BIOL 181	College Biology I/Organismal Bio (GT-SC2)	3
BIOL 181L	College Biology I/Organismal Bio Lab (GT-SC1)	1
BIOL 182	College Biology II/Cellular Biology (GT-SC2)	3
BIOL 182L	College Biology II/Cellular Bio Lab (GT-SC1)	1
BIOL 201	Botany (GT-SC2)	2
BIOL 201L	Botany Laboratory (GT-SC1)	2
BIOL 465	Environmental Toxicology	3
CHEM 121	General Chemistry I (GT-SC2)	4
CHEM 121L	General Chemistry Lab I (GT-SC1)	1
CHEM 122	General Chemistry II (GT-SC2)	4
CHEM 122L	General Chemistry Lab II (GT-SC1)	1
CHEM 301	Organic Chemistry I	3
CHEM 301L	Organic Chemistry Lab I	2
CHEM 302	Organic Chemistry II	3
CHEM 302L	Organic Chemistry Lab II	2
CHEM 311	Biochemistry Survey	3
CBC 413	Cannabis Physiology & Growth	3
CBC 413L	Cannabis Physiology & Growth Lab	1
CBC 463	Medicinal Chemistry & Pharmacology	3
CBC 493	Seminar	1
Total Credits		**46**

All other requirements for CBC Concentrations are the same as for the regular undergraduate degrees. For more information, consult the programs listed:

- Cannabis Biology & Chemistry: Analytical Concentration, Bachelor of Science (p. 430)
- Cannabis Biology & Chemistry: Natural Products Concentration, Bachelor of Science (p. 431)

Graduate Requirements

Specific Core Requirements

Course	Title	Credits
CBC 510	Foundations in Graduate Studies	3
CBC 589	Thesis Defense	1
CBC 593	Seminar	1
CBC 599	Thesis Research	6

Additional Core Requirements

Students must complete 10 credit hours of the following:

Course	Title	Credits
CBC 501	Medicinal Plant Biochemistry	3
CBC 513	Cannabis Physiology & Growth	3
CBC 513L	Cannabis Physiology & Growth Lab	1
CBC 522	Natural Products Extraction & Analysis	3

CBC 522L	Natural Products Extraction & Analysis Lab	1
CBC 563	Medicinal Chemistry & Pharmacology	3

Additional Program Requirements

In addition to the core courses for the graduate program and those specific to the concentration, students must also take graduate elective credits that are approved by the student's thesis committee. The number of elective credits depends on the concentration. For the Analytical concentration, a minimum of six graduate elective credits must be completed; for the Natural Products concentration, a minimum of nine graduate elective credits must be completed.

Course	Title	Credits
BIOL 540	Advanced Biotechniques	2
BIOL 540L	Advanced Biotechniques Lab	2
BIOL 548	Biological Statistics	3
BIOL 585	Plant Taxonomy	2
BIOL 585L	Plant Taxonomy Lab	2
CHEM 512	Biochemistry II	3
CHEM 512L	Biochemistry II Lab	2
CHEM 513	Molecular Basis of Disease	3
CHEM 519	Instrumental Analysis	3
CHEM 519L	Instrumental Analysis Lab	2
CHEM 525	Environmental Chemistry	3
CHEM 525L	Environmental Chemistry Lab	2
CHEM 529	Advanced Analytical Chemistry	3
CHEM 591	Special Topics	1-4

Cannabis Biology & Chemistry, Certificate

The Cannabis Biology and Chemistry Certificate Program is a 9-credit hour certificate program, offered at the undergraduate and graduate levels, that is housed in the Chemistry Department. The Program is designed for students with a strong biology or chemistry background or students with an undergraduate degree in biology or chemistry to gain advanced coursework relevant to cannabis sciences.

Entering students are expected to have completed relevant courses from the following list which are prerequisites for the CBC courses included in the certificate program. The specific required prerequisite courses will vary depending on the student's selection of CBC courses.

Course	Title	Credits
BIOL 181	College Biology I/Organismal Bio (GT-SC2)	3
BIOL 181L	College Biology I/Organismal Bio Lab (GT-SC1)	1
BIOL 182	College Biology II/Cellular Biology (GT-SC2)	3
BIOL 182L	College Biology II/Cellular Bio Lab (GT-SC1)	1
BIOL 201	Botany (GT-SC2)	2
BIOL 201L	Botany Laboratory (GT-SC1)	2
BIOL 350	Mendelian and Population Genetics	2
BIOL 351	Molecular Biology & Genetics	3
CHEM 121	General Chemistry I (GT-SC2)	4
CHEM 122	General Chemistry II (GT-SC2)	4
CHEM 301	Organic Chemistry I	3
CHEM 317	Quantitative Analysis	3
CHEM 322	Physical Chemistry II	3
CHEM 419	Instrumental Analysis	3
or CHEM 519	Instrumental Analysis	
CHEM 419L	Instrumental Analysis Lab	2
or CHEM 519L	Instrumental Analysis Lab	
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5

Specific Admission Requirements

Current non-Cannabis Biology and Chemistry degree program students at CSU Pueblo can complete the certificate program as part of their academic course work. Students interested in the certificate program who are not current CSU Pueblo students may complete the certificate as a Guest Student.

Program Goals

The Cannabis Biology and Chemistry Certificate Program is designed for students with a strong Biology and Chemistry background that wish to apply these skills and knowledge in the area of cannabis science.

Student Learning Outcomes

- Students will understand advanced chemical and biological principles applied in these fields and how those principles can be applied to the emerging field of cannabis science.
- Students will understand cannabis physiology and growth, the pharmacological implications, and the practical applications for the industry.
- Students will use contemporary instruments and techniques for studying plant biological and chemical processes.

Outcome Assessment Activities

Within the Department's existing assessment structures, the performance of Certificate students in the specific courses will be evaluated separately from other students.

Specific Program Requirements

A student must complete a minimum of 9 credit hours of CBC coursework at the undergraduate level for the Certificate. Students may select from the listed courses. A student will receive a Cannabis Biology and Chemistry Certificate after completing 9 credits of the following courses with a grade of C or better.

Course	Title	Credits
CBC 401	Medicinal Plant Biochemistry	3
CBC 413	Cannabis Physiology & Growth	3
CBC 413L	Cannabis Physiology & Growth Lab	1
CBC 422	Natural Products Extraction & Analysis	3
CBC 422L	Natural Products Extraction & Analysis Lab	1
CBC 463	Medicinal Chemistry & Pharmacology	3
CBC 493	Seminar	1

Cannabis Biology & Chemistry, Master of Science

The graduate program leading to a Master of Science in Cannabis Biology & Chemistry allows individuals interested in the field of cannabis to gain a graduate degree in the science associated with cannabis. The

program is beneficial to students who desire to work on the scientific side of the cannabis industry. The program can be tailored to individual student needs and future directions (doctoral program, analytical laboratory, research laboratory, etc.). The majority of the coursework is centered around cannabis, but elective courses will expand the student's knowledge in scientific areas beyond cannabis.

Specific Admission Requirements

Admission to the Cannabis Biology and Chemistry MS program (CBC MS) is in accordance with Colorado State University Pueblo and the Department of Chemistry requirements for master's programs as specified in the University's Catalog. The application file for admission to the CBC MS program must include:

1. A completed Cannabis Biology and Chemistry MS application form (online);
2. A letter of intent explaining your expectations and purpose for obtaining the MS in CBC;
3. Transcript(s) documenting an undergraduate GPA of 3.000 or higher;
4. Three letters of recommendation from faculty addressing the student's qualifications and potential to succeed in the program; and
5. An interview (in-person or remote) with graduate faculty of the Chemistry Department and Biology Department, and the Chemistry / Biochemistry / CBC MS Program Director.

GRE scores are optional and may be used to supplement your application.

Program Goals

The objective of the program is to prepare students for career in the scientific side of the cannabis industry. Graduates will be well versed in several scientific aspects of cannabis (separations, pharmacology, etc.) and will be prepared to undertake a career in the industry, or government, or to further their education in a doctoral program. Since the program requires the completion of a thesis, graduates will have full understanding of the application of the scientific method to scientific research, especially in the area of experimental design, experimentation, and data-driven decision making. Graduates will also be adept at preparation and presentation of scientific materials.

Student Learning Outcomes

Upon completion of a CBC-MS degree, students will:

- Evaluate the scientific literature and use it in their courses and their research applied to cannabis science.
- Effectively communicate scientific research, both their own and information from the research literature, in written and oral fashions.
- Demonstrate or explain use of advanced chemical and biological principles applied to the emerging field of cannabis science.
- Develop and master scientific problem-solving skills required to define and solve basic or applied original scientific questions; propose appropriate experimental design; and effectively employ the scientific method.
- Actively engage in research/internships and discourse with the faculty engaged in scientific cannabis research in the Biology or Chemistry Departments and other STEM disciplines.
- Disseminate, in collaboration with faculty, the products of the CBC-MS program within the CSU Pueblo community and with communities outside of the University in activities using their professional expertise.

Outcomes Assessment Activities

The faculty will use a variety of methods for evaluating student learning outcomes. These include required student enrollment in CBC 510 Foundations in Graduate Studies (3 credit hours), 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, CBC 593 Seminar (1 credit hour), that will be evaluated by cognizant faculty members. A written research thesis or internship report will be publicly 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 media.

Specific Program Requirements

Specific Core Requirements

Course	Title	Credits
CBC 510	Foundations in Graduate Studies	3
CBC 589	Thesis Defense	1
CBC 593	Seminar	1
CBC 599	Thesis Research	6
Total Credits		**11**

Additional Core Requirements

Students must complete 10 credit hours from the following:

Course	Title	Credits
CBC 501	Medicinal Plant Biochemistry	3
CBC 513	Cannabis Physiology & Growth	3
CBC 513L	Cannabis Physiology & Growth Lab	1
CBC 522	Natural Products Extraction & Analysis	3
CBC 522L	Natural Products Extraction & Analysis Lab	1
CBC 563	Medicinal Chemistry & Pharmacology	3

Additional Requirements

The elective coursework must be at the 500 level or above and is approved by the student's thesis committee. The courses should be selected to benefit the student and to prepare the student for their desired path after completion of the MS degree. These elective courses can include, but are not limited to, the CBC courses not completed as part of the Core requirements or approved Chemistry and Biology graduate courses. The following list provides examples of courses that may be counted as Elective courses.

Students must complete at least 9 credits of the following:

Course	Title	Credits
BIOL 540	Advanced Biotechniques	2
BIOL 540L	Advanced Biotechniques Lab	2
BIOL 548	Biological Statistics	3

BIOL 585	Plant Taxonomy	2
BIOL 585L	Plant Taxonomy Lab	2
CHEM 512	Biochemistry II	3
CHEM 512L	Biochemistry II Lab	2
CHEM 513	Molecular Basis of Disease	3
CHEM 519	Instrumental Analysis	3
CHEM 519L	Instrumental Analysis Lab	2
CHEM 525	Environmental Chemistry	3
CHEM 525L	Environmental Chemistry Lab	2
CHEM 529	Advanced Analytical Chemistry	3
CHEM 591	Special Topics	1

Specific Graduation Requirements

The program requires that all students complete 30 credit hours of graduate coursework. A set of common core coursework, totaling 11 credit hours, must be completed by all students in the program. Additional core coursework comes from completion of at least ten credit hours in the listed CBC courses. To complete the degree, students must complete at least nine credit hours of elective graduate coursework that is approved by the student's thesis committee. The elective coursework can be completed in Chemistry, Biology, Math, Engineering, or any graduate subject approved by the student's thesis committee. Included in the core courses is six credits of Thesis Research and a one credit Thesis Defense. All students must write and successfully defend a thesis based on their research.

All students must maintain a minimum GPA of a 3.000, and students must have a 3.000 GPA in all coursework that is approved by their thesis committee.

Cannabis Biology & Chemistry, Post-Baccalaureate Certificate

The Cannabis Biology and Chemistry Certificate Program is a 9-credit hour certificate program offered at the undergraduate and graduate levels that is housed in the Chemistry Department. The Program is designed for students with a strong biology or chemistry background or students with an undergraduate degree in biology or chemistry to gain advanced coursework relevant to cannabis sciences.

Entering students are expected to have completed relevant courses from the following list which are prerequisites for the CBC courses included in the certificate program. The specific required prerequisite courses will vary depending on the student's selection of CBC courses.

Course	Title	Credits
BIOL 181	College Biology I/Organismal Bio (GT-SC2)	3
BIOL 181L	College Biology I/Organismal Bio Lab (GT-SC1)	1
BIOL 182	College Biology II/Cellular Biology (GT-SC2)	3
BIOL 182L	College Biology II/Cellular Bio Lab (GT-SC1)	1
BIOL 201	Botany (GT-SC2)	2
BIOL 201L	Botany Laboratory (GT-SC1)	2
BIOL 350	Mendelian and Population Genetics	2
BIOL 351	Molecular Biology & Genetics	3
CHEM 121	General Chemistry I (GT-SC2)	4
CHEM 122	General Chemistry II (GT-SC2)	4
CHEM 301	Organic Chemistry I	3
CHEM 317	Quantitative Analysis	3
CHEM 317L	Quantitative Analysis Lab	2
CHEM 322	Physical Chemistry II	3
CHEM 419	Instrumental Analysis	3
CHEM 419L	Instrumental Analysis Lab	2
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5

Specific Admission Requirements

An applicant for the graduate certificate must be admitted as a graduate student and can then complete the certificate in non-degree status. Colorado residents can complete the certificate as guest (for credit) students. If a student decides to later pursue the MS in Cannabis Biology and Chemistry, the student must apply and be accepted to that degree program; credits completed toward the certificate can be applied toward the degree.

Program Goals

The Cannabis Biology and Chemistry Certificate Program is designed for students with a strong background in Biology and Chemistry who wish to apply these skills and knowledge in the area of cannabis science.

Student Learning Outcomes

- Students will understand advanced chemical and biological principles applied in these fields and how those principles can be applied to the emerging field of cannabis science.
- Students will understand cannabis physiology and growth, the pharmacological implications, and the practical applications for the industry.
- Students will use contemporary instruments and techniques for studying plant biological and chemical processes.

Outcomes Assessment Activities

Within the Department's existing assessment structures, the performance of Certificate students in the specific courses will be evaluated separately from other students.

Specific Program Requirements

A student must complete a minimum of 9 credit hours of CBC coursework at the graduate level for the Certificate. Students may select from the listed courses. A student will receive a Cannabis Biology and Chemistry Certificate after completing 9 credits of the following courses with a grade of C or better.

Course	Title	Credits
CBC 501	Medicinal Plant Biochemistry	3
CBC 513	Cannabis Physiology & Growth	3
CBC 513L	Cannabis Physiology & Growth Lab	1
CBC 522	Natural Products Extraction & Analysis	3
CBC 522L	Natural Products Extraction & Analysis Lab	1
CBC 563	Medicinal Chemistry & Pharmacology	3
CBC 593	Seminar	1

Cannabis Biology & Chemistry: Analytical Concentration, Bachelor of Science

The major in Cannabis Biology and Chemistry leads to a Bachelor of Science (BS) degree. The major is a rigorous, interdisciplinary degree that has solid foundations in both biology and chemistry. In addition, a variety of supporting and general education courses are available to meet a wide range of interests, backgrounds and needs. The Cannabis Biology and Chemistry program prepares students to enter the workforce as scientists or technicians in a wide variety of different laboratories including agricultural and food, biology, chemistry, environmental science, and cannabis.

The Analytical emphasis leads to a CBC BS degree for those with more interest in chemistry.

Specific Program Requirements

Specific Core Requirements

Course	Title	Credits
BIOL 181	College Biology I/Organismal Bio (GT-SC2)	3
BIOL 181L	College Biology I/Organismal Bio Lab (GT-SC1)	1
BIOL 182	College Biology II/Cellular Biology (GT-SC2)	3
BIOL 182L	College Biology II/Cellular Bio Lab (GT-SC1)	1
BIOL 201	Botany (GT-SC2)	2
BIOL 201L	Botany Laboratory (GT-SC1)	2
BIOL 465	Environmental Toxicology	3
CHEM 121	General Chemistry I (GT-SC2)	4
CHEM 121L	General Chemistry Lab I (GT-SC1)	1
CHEM 122	General Chemistry II (GT-SC2)	4
CHEM 122L	General Chemistry Lab II (GT-SC1)	1
CHEM 301	Organic Chemistry I	3
CHEM 301L	Organic Chemistry Lab I	2
CHEM 302	Organic Chemistry II	3
CHEM 302L	Organic Chemistry Lab II	2
CHEM 311	Biochemistry Survey	3
CBC 413	Cannabis Physiology & Growth	3
CBC 413L	Cannabis Physiology & Growth Lab	1
CBC 463	Medicinal Chemistry & Pharmacology	3
CBC 493	Seminar (Seminar)	1
Total Credits		**46**

Specific Concentration Requirements

Course	Title	Credits
CHEM 170	Academic Orientation	0.50
CHEM 317	Quantitative Analysis	3
CHEM 317L	Quantitative Analysis Lab	2
CHEM 322	Physical Chemistry II	3
CHEM 370	Academic Enrichment	0.50
CHEM 419	Instrumental Analysis	3
CHEM 419L	Instrumental Analysis Lab	2
CBC 422	Natural Products Extraction & Analysis	3
CBC 422L	Natural Products Extraction & Analysis Lab	1
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
PHYS 201 or PHYS 221	Principles of Physics I (GT-SC2) General Physics I	3
PHYS 202 or PHYS 222	Principles Of Physics II (GT-SC2) General Physics II	3
Advisor Approved Electives		**5-7**
General Electives		**7-11**
Total Credits		**46-52**

Specific Graduation Requirements

Students majoring in Cannabis Biology & Chemistry are required to have a cumulative GPA of 2.000 or better in their chemistry and biology courses.

Cannabis Biology & Chemistry: Hemp Agriculture Concentration, Bachelor of Science

The major in Cannabis Biology and Chemistry leads to a Bachelor of Science (BS) degree. The major is a rigorous, interdisciplinary degree that has solid foundations in both biology and chemistry. In addition, a variety of supporting and general education courses are available to meet a wide range of interests, backgrounds and needs. The Cannabis Biology and Chemistry program prepares students to enter the workforce as scientists or technicians in a wide variety of different laboratories including agricultural and food, biology, chemistry, environmental science, and cannabis.

The Hemp Agriculture concentration leads to a CBC BS degree for those with more interest in agriculture.

Program Goals

- To supply students with the necessary coursework to serve as leaders in an emerging cannabis field, providing a non-biased, science-based approach to problem solving and data collection and analysis.
- To prepare students upon graduation to enter field positions in government or private industry.
- To provide students with the necessary background to successfully pursue graduate study towards a professional career in natural products, plant chemistry or biology, or agriculture.

Student Learning Outcomes

Students will demonstrate knowledge, understanding and skill in:

- Basic chemical and biological principles applied in these fields and how those principles can be applied to the emerging field of cannabis science.
- Cannabis physiology and growth, the pharmacological implications, and the practical applications for the industry.
- Use of contemporary instruments and techniques for studying plant biological and chemical processes.
- Communication and interpersonal skills to enhance their working relations with co-workers, other professionals, the public and non-governmental organizations.

- Reading and interpreting the scientific literature and presenting a synthesis or summation of it accurately in oral and / or written form.
- Critical thinking and problem solving skills using experimental design and the scientific process.

Outcomes Assessment Activities

Assessment of a student's improvement in intellectual skills, knowledge and capacities from entrance to graduation will be accomplished through the use of several tools. Exams and courses assignments will be used as one measure of proficiency in writing skills, acquisition of knowledge, communication, problem solving, and laboratory and field skills. All majors will take a senior seminar course requiring scientific literature interpretation along with oral and written presentations evaluated by peers and department faculty.

Specific Program Requirements

Courses with the following prefixes are online courses through Colorado State University (Fort Collins). These courses can be taken simultaneously through CSU Pueblo and CSU to fulfill coursework in this emphasis.

Specific Core Requirements

This will share the same Core coursework as other Cannabis Biology and Chemistry concentrations.

Course	Title	Credits
BIOL 181	College Biology I/Organismal Bio (GT-SC2)	3
BIOL 181L	College Biology I/Organismal Bio Lab (GT-SC1)	1
BIOL 182	College Biology II/Cellular Biology (GT-SC2)	3
BIOL 182L	College Biology II/Cellular Bio Lab (GT-SC1)	1
BIOL 201	Botany (GT-SC2)	2
BIOL 201L	Botany Laboratory (GT-SC1)	2
BIOL 465	Environmental Toxicology	3
CHEM 121	General Chemistry I (GT-SC2)	4
CHEM 121L	General Chemistry Lab I (GT-SC1)	1
CHEM 122	General Chemistry II (GT-SC2)	4
CHEM 122L	General Chemistry Lab II (GT-SC1)	1
CHEM 301	Organic Chemistry I	3
CHEM 301L	Organic Chemistry Lab I	2
CHEM 302	Organic Chemistry II	3
CHEM 302L	Organic Chemistry Lab II	2
CHEM 311	Biochemistry Survey	3
CBC 413	Cannabis Physiology & Growth	3
CBC 413L	Cannabis Physiology & Growth Lab	1
CBC 463	Medicinal Chemistry & Pharmacology	3
CBC 493	Seminar	1
Total Credits		**46**

Additional Requirements

Course	Title	Credits
BIOL 171	First Year Seminar	0.5-1
or CHEM 170	Academic Orientation	
Must take CHEM 370 after CHEM 170 is completed		
BIOL 350	Mendelian and Population Genetics	2
BIOL 351	Molecular Biology & Genetics	3
CHEM 498	Internship	1-6
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	4-5
or MATH 221	Applied Calc: An Intuitive Approach (GT-MA1)	
PHYS 201	Principles of Physics I (GT-SC2)	3-4
or PHYS 221	General Physics I	
PHYS 202	Principles Of Physics II (GT-SC2)	3-4
or PHYS 222	General Physics II	
The following courses are online offerings from CSU Fort Collins		
AREC 300 - Issues in Agriculture		3
AREC 375 - Agricultural Law		3
BSPM 102 - Insects, Science, and Society		3
SOCR 240 - Introductory Soil Science		4
General Education		**24**
Advisor-Approved Electives		**9-11**
General Electives		**9-11**

Note: CHEM 170 + CHEM 370 are equivalent in credit-hours to BIOL 171

Advisor-approved electives (9-11 credits required) - 6 credits must be upper-division coursework

Course	Title	Credits
BSAD 270	Business Communications	3
BSAD 302	Ethics in Business	3
BIOL 453	Ecology	2
BIOL 453L	Ecology Field Studies	2
CHEM 317	Quantitative Analysis	3
CHEM 317L	Quantitative Analysis Lab	2
CBC 401	Medicinal Plant Biochemistry	3
The following electives are offered online through CSU Fort Collins		
AREC 202 - Agricultural and Resource Economics		3
AREC 305 - Agricultural and Resource Enterprise Analysis		3
AREC 310 - Agricultural Marketing		3
AREC 408 - Agricultural Finance		3
AREC 428 - Agricultural Business Management		3
BSPM 201 – Weed Management and Control		3
BSPM 355A – Horticulture Pathology: General Pathology		1
BZ 440 - Plant Physiology		3
HORT 401 – Medicinal and Value-Added Uses of Plant		3
HORT 410 – Postharvest Biology and Technology		3
LIFE 220 - Fundamentals of Ecology		3
SOCR 400 - Soils and Global Change		3

Specific Graduation Requirements

Students majoring in cannabis biology and chemistry are required to have a cumulative GPA of 2.000 or better in their chemistry and biology courses.

Cannabis Biology & Chemistry: Natural Products Concentration, Bachelor of Science

The major in Cannabis Biology and Chemistry leads to a Bachelor of Science (BS) degree. The major is a rigorous, interdisciplinary degree that has solid foundations in both biology and chemistry. In addition,

a variety of supporting and general education courses are available to meet a wide range of interests, backgrounds and needs. The Cannabis Biology and Chemistry program prepares students to enter the workforce as scientists or technicians in a wide variety of different laboratories including agricultural and food, biology, chemistry, environmental science, and cannabis.

The Natural Products emphasis leads to a CBC BS degree for those with more interest in biology.

Specific Program Requirements

Specific Core Requirements

Course	Title	Credits
BIOL 181	College Biology I/Organismal Bio (GT-SC2)	3
BIOL 181L	College Biology I/Organismal Bio Lab (GT-SC1)	1
BIOL 182	College Biology II/Cellular Biology (GT-SC2)	3
BIOL 182L	College Biology II/Cellular Bio Lab (GT-SC1)	1
BIOL 201	Botany (GT-SC2)	2
BIOL 201L	Botany Laboratory (GT-SC1)	2
BIOL 465	Environmental Toxicology	3
CHEM 121	General Chemistry I (GT-SC2)	4
CHEM 121L	General Chemistry Lab I (GT-SC1)	1
CHEM 122	General Chemistry II (GT-SC2)	4
CHEM 122L	General Chemistry Lab II (GT-SC1)	1
CHEM 301	Organic Chemistry I	3
CHEM 301L	Organic Chemistry Lab I	2
CHEM 302	Organic Chemistry II	3
CHEM 302L	Organic Chemistry Lab II	2
CHEM 311	Biochemistry Survey	3
CBC 413	Cannabis Physiology & Growth	3
CBC 413L	Cannabis Physiology & Growth Lab	1
CBC 463	Medicinal Chemistry & Pharmacology	3
CBC 493	Seminar	1
Total Credits		**46**

Specific Concentration Requirements

Course	Title	Credits
BIOL 171	First Year Seminar	1
BIOL 350	Mendelian and Population Genetics	2
BIOL 351	Molecular Biology & Genetics	3
BIOL 422	Neurobiology	3
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	4-5
or MATH 221	Applied Calc: An Intuitive Approach (GT-MA1)	
CBC 401	Medicinal Plant Biochemistry	3
PHYS 201	Principles of Physics I (GT-SC2)	3-4
or PHYS 221	General Physics I	
PHYS 202	Principles Of Physics II (GT-SC2)	3-4
or PHYS 222	General Physics II	
Advisor Approved Electives (At least 6 upper division credits)		**9-11**
General Electives		**15-19**

Specific Graduation Requirements

Students majoring in Cannabis Biology & Chemistry are required to have a cumulative GPA of 2.000 or better in their chemistry and biology courses.

Chemistry 3+2 Plan, Joint Bachelor of Science/Master of Science

Chemistry 3+2 Plan (BS/MS)

A feature of the Chemistry MS program is the 3+2 plan. This plan gives qualified undergraduate students the opportunity to simultaneously pursue both the Baccalaureate (BS) and Master of Science (MS) degrees. Talented students are thus quickly moved toward expanding their academic and scientific horizons based on individual student's abilities and motivation.

Specific requirements for the 3+2 program are included in the Chemistry MS description of the College of Science, Technology, Engineering, and Mathematics undergraduate programs section of this catalog. Students must meet the requirements of both degrees.

Specific Admission Requirements

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 (online);
2. A letter of intent explaining your expectations and purpose for obtaining the MS in Chemistry;
3. Current CSU Pueblo transcript documenting an undergraduate GPA or 3.00 overall and 3.25 in chemistry courses; and
4. Three letters of recommendation from CSU Pueblo faculty addressing your qualifications and potential to succeed in the program.

Expected Student Learning Outcomes

Upon completion of the Chemistry 3+2 BS/MS, students will:

- Evaluate the scientific literature and use it in their courses and their research.
- 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; propose appropriate experimental design; and effectively employ the scientific method.
- Actively engage in research/internships and discourse with the faculty in the Chemistry Department and other STEM disciplines.
- Disseminate, in collaboration with faculty, the products of the Chemistry-MS program within the CSU Pueblo community and with communities outside of the University in activities using their professional expertise.

Outcomes Assessment Activities

The faculty will use a variety of methods for evaluating student learning outcomes. These include required student enrollment in CHEM 510 Foundations in Graduate Studies (3 c.h.), 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 Seminar (1 c.h.)) that will be evaluated by cognizant faculty members. A written research thesis or internship report will be publicly 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 and / or at appropriate scientific meetings, publish the results of their research in peer reviewed scientific journals, or disseminate information through other appropriate media.

Specific Program Requirements

Students in the 3+2 BS/MS program must complete:

- The requirements for a BS in Chemistry including specific concentration courses.
- The requirements for the MS in Chemistry including thesis or non-thesis options.

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.

The 3+2 degree plan has the following requirements:

Course	Title	Credits
General Education		24
BS Chemistry Core		42
BS Chemistry Concentration		29-34
MS Chemistry Requirements		30-32
General Electives		13-20
Total Credits		**138-152**

Undergraduate Requirements

Specific Core Requirements

Course	Title	Credits
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
CHEM 170	Academic Orientation	0.5
CHEM 301 & 301L	Organic Chemistry I and Organic Chemistry Lab I	5
CHEM 302 & 302L	Organic Chemistry II and Organic Chemistry Lab II	5
CHEM 317 & 317L	Quantitative Analysis and Quantitative Analysis Lab	5
CHEM 321	Physical Chemistry I	3
CHEM 322	Physical Chemistry II	3
CHEM 370	Academic Enrichment	0.5
CHEM 419 & 419L	Instrumental Analysis and Instrumental Analysis Lab	5
CHEM 420 & 420L	Inorganic Chemistry and Inorganic Chemistry Lab	4
CHEM 493	Seminar	1
Total Credits		**42**

Select from the following BS Chemistry concentrations:

- ACS Certified Concentration (p. 438)
- Basic Chemistry Concentration (p. 439)
- Biochemistry Concentration (p. 440)
- Chemistry Double Major Concentration (p. 436)
- Environmental Chemistry Concentration (p. 442)
- Chemistry Secondary Teaching Certification Concentration (https://catalog.csupueblo.edu/college-of-science-technology-engineering-and-mathematics/chemistry/chemistry-bs-secondary-teaching-certification-concentration/)

Graduate 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 credit hours). 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 Seminar (3 c.h.).

Thesis option students are required to defend their research results before their graduate 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 term or in consultation with the program director or department chair. If an examination is failed, the requirement may be satisfied by completing the designated undergraduate coursework in the appropriate subdiscipline, as specified by the program director or department chair, with a minimum grade of "B". Students enrolling into the 3+2 program will be exempt from the requirement to pass qualifying exams if they have completed courses at CSU Pueblo in analytical, biological, inorganic, organic, or physical chemistry with a grade of "B" or better. Students enrolled in the 3+2 program required to pass qualifying exams will schedule the exams in consultation with the Program Director.

Specific Core Requirements

Course	Title	Credits
Select three of the following:		**9**
CHEM 501	Advanced Organic Chemistry	3
CHEM 511	Biochemistry I	3
or CHEM 512	Biochemistry II	
CHEM 521	Advanced Inorganic Chemistry	3

CHEM 529	Advanced Analytical Chemistry	3
CHEM 531	Advanced Physical Chemistry	3
Total Credits		**9**

Plan A (Thesis Option)

Course	Title	Credits
Thesis Option Courses		**11**
CHEM 510	Foundations in Graduate Studies	3
CHEM 589	Thesis Defense	1
CHEM 593	Seminar	1
CHEM 599	Thesis Research Students may only enroll for a total of 6 credit hours.	1
Electives		**10**
Total Credits		**21**

Plan B (Non-Thesis Option)

Course	Title	Credits
Non-Thesis Option Courses		**9**
CHEM 510	Foundations in Graduate Studies	3
CHEM 588	Internship Defense	1
CHEM 593	Seminar	1
CHEM 598	Internship	4
Electives		**14**
Total Credits		**23**

Electives

Elective courses may be selected from the following or others may be added with permission of the Graduate Comittee.

Course	Title	Credits
CHEM 501 & 501L	Advanced Organic Chemistry and Advanced Organic Chemistry Lab	5
CHEM 503	Polymer Chemistry	3
CHEM 511	Biochemistry I	3
CHEM 512 & 512L	Biochemistry II and Biochemistry II Lab	5
CHEM 519 & 519L	Instrumental Analysis and 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	3
CHEM 591	Special Topics	1-4
CHEM 592	Research	1-3
CHEM 595	Independent Study	1-4

Chemistry, Master of Science

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 a minimum of 30 semester credits (thesis option) or 32 semester credits (non-thesis option) of approved graduate course work.

Specific Admission Requirements

Admission to the Chemistry MS program is in accordance with Colorado State University Pueblo and the Department of Chemistry requirements for master's programs as specified in the University's Catalog. The application file for admission to the Chemistry MS program must include:

1. A completed Chemistry MS application form (online);
2. A letter of intent explaining your expectations and purpose for obtaining the MS in Chemistry;
3. Transcript(s) documenting an undergraduate GPA of 3.000 or higher;
4. Three letters of recommendation from faculty addressing the student's qualifications and potential to succeed in the program; and
5. An interview (in-person or remote) with graduate faculty of the Chemistry Department and the Chemistry / Biochemistry MS Program Director.

GRE scores are optional and may be used to supplement your application.

Expected Student Learning Outcomes

Upon completion of the Chemistry MS or BS/MS, students will:

- Evaluate the scientific literature and use it in their courses and their research.
- 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; propose appropriate experimental design; and effectively employ the scientific method.
- Actively engage in research/internships and discourse with the faculty in the Chemistry Department and other STEM disciplines.
- Disseminate, in collaboration with faculty, the products of the Chemistry-MS program within the CSU Pueblo community and with communities outside of the University in activities using their professional expertise.

Outcomes Assessment Activities

The faculty will use a variety of methods for evaluating student learning outcomes. These include required student enrollment in CHEM 510 Foundations in Graduate Studies (3 c.h.), 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 Seminar (1 c.h.)) that will be evaluated by cognizant faculty members. A written research thesis or internship report will be publicly 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 and / or at appropriate scientific meetings, publish the results of their research in peer reviewed scientific journals, or disseminate information through other appropriate media.

Specific Program Requirements

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

Thesis option students are required to defend their research results before their graduate committee. 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 term or in consultation with the program director or department chair. If an examination is failed, the requirement may be satisfied by completing the designated undergraduate coursework in the appropriate subdiscipline, as specified by the program director or department chair, with a minimum grade of "B". Students enrolling into the 3+2 program will be exempt from the requirement to pass qualifying exams if they have completed courses at CSU Pueblo in analytical, biological, inorganic, organic, or physical chemistry with a grade of "B" or better. Students enrolled in the 3+2 program required to pass qualifying exams will schedule the exams in consultation with the Program Director.

Chemistry program requirements are summarized as follows:

Required Core Courses

Course	Title	Credits
Select three of the following:		9
CHEM 501	Advanced Organic Chemistry	3
CHEM 511	Biochemistry I	3
or CHEM 512	Biochemistry II	
CHEM 521	Advanced Inorganic Chemistry	3
CHEM 529	Advanced Analytical Chemistry	3
CHEM 531	Advanced Physical Chemistry	3
Total Credits		**9**

Plan A (Thesis Option)

Course	Title	Credits
Required Core Courses		
Core Courses		9
Thesis Option Courses		
CHEM 510	Foundations in Graduate Studies	3
CHEM 589	Thesis Defense	1
CHEM 593	Seminar	1
CHEM 599	Thesis Research [1]	6
Elective Courses		
Select 10 credits		10
Total Credits		**30**

[1] Students may only enroll for a total of 6 credit hours of CHEM 599 Thesis Research (1-6 c.h.).

Plan B (Non-Thesis Option)

Course	Title	Credits
Required Core Courses		
Core Courses		9
Non-Thesis Option Courses		
CHEM 510	Foundations in Graduate Studies	3
CHEM 588	Internship Defense	1
CHEM 593	Seminar	1
CHEM 598	Internship	4
Elective Courses		
Select 14 credits		14
Total Credits		**32**

Electives

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

Course	Title	Credits
CHEM 501 & 501L	Advanced Organic Chemistry and Advanced Organic Chemistry Lab	5
CHEM 503	Polymer Chemistry	3
CHEM 511	Biochemistry I	3
CHEM 512 & 512L	Biochemistry II and Biochemistry II Lab	5
CHEM 519 & 519L	Instrumental Analysis and 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, Minor

Specific Program Requirements

Course	Title	Credits
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5

Select 10 credits in Upper-division CHEM Electives	10
Total Credits	**20**

Chemistry/Biology Double Major, Bachelor of Science

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:
  a. Basic Chemistry
  b. ACS Certified Curriculum
  c. Biochemistry
  d. Environmental Chemistry
  e. Chemistry/Teacher Certification
  f. Double Major
  g. Chemistry Minor

Expected Student Outcomes

Chemistry graduates are expected to:

- Understand the concept of and be able to apply the scientific method to problem solution;
- Understand classifications of chemical compounds, general reaction types and quantitative aspects of stoichiometry as applied to chemical reactions;
- Apply basic knowledge of related fields such as mathematics and physics to problem solving, methods of analysis and use of numerical data in the chemical sciences;
- Demonstrate a knowledge of basic laboratory skills, methods and equipment used in chemistry for observation and analysis of chemical systems;
- Read, think and write critically and review current literature in the chemical sciences; and
- Exhibit a comprehensive knowledge of the fundamental theories, concepts and skills necessary in the chemical sciences.

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 Achievement Test (MFAT) 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.

Specific Program 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. Students minoring in chemistry are required to earn a grade of "C" or better in all of the chemistry courses applying to the minor.
- 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.
- 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 take an exit examination during the senior year, covering the undergraduate chemistry curriculum.

Specific Core Requirements

Course	Title	Credits
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
CHEM 170	Academic Orientation	0.5
CHEM 301 & 301L	Organic Chemistry I and Organic Chemistry Lab I	5
CHEM 302 & 302L	Organic Chemistry II and Organic Chemistry Lab II	5
CHEM 317 & 317L	Quantitative Analysis and Quantitative Analysis Lab	5
CHEM 321	Physical Chemistry I	3
CHEM 322	Physical Chemistry II	3
CHEM 370	Academic Enrichment	0.5
CHEM 419 & 419L	Instrumental Analysis and Instrumental Analysis Lab	5
CHEM 420 & 420L	Inorganic Chemistry and Inorganic Chemistry Lab	4
CHEM 493	Seminar	1
Total Credits		**42**

Specific Concentration Requirements

Course	Title	Credits
Required Chemistry Core		
Chemistry Core (including **either** major seminar course)		42
Other Required Courses		
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
Select one of the following:		4-5

PHYS 201 & 201L	Principles of Physics I (GT-SC2) and Principles of Physics Lab I (GT-SC1)	4
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
Select one of the following:		4-5
PHYS 202 & 202L	Principles Of Physics II (GT-SC2) and Principles Of Physics II Lab (GT-SC1)	4
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
Institutional and General Education		
Select 24 credits		24
Approved Second Major Minimum		
Second Major		39
Total Credits		**123-125**

Chemistry: 7-12 Teacher Preparation Concentration, Bachelor of Science

The major in Chemistry leads to a Bachelor of Science (BS) degree. The secondary teaching certification emphasis provides a solid foundation in the major core areas of chemistry, as well as training in the teaching of chemistry in high school.

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:
  a. Basic Chemistry
  b. ACS Certified Curriculum
  c. Biochemistry
  d. Environmental Chemistry
  e. Chemistry/Teacher Certification
  f. Double Major
  g. Chemistry Minor

Expected Student Outcomes

Chemistry graduates are expected to:

- Understand the concept of and be able to apply the scientific method to problem solution;
- Understand classifications of chemical compounds, general reaction types and quantitative aspects of stoichiometry as applied to chemical reactions;
- Apply basic knowledge of related fields such as mathematics and physics to problem solving, methods of analysis and use of numerical data in the chemical sciences;
- Demonstrate a knowledge of basic laboratory skills, methods and equipment used in chemistry for observation and analysis of chemical systems;
- Read, think and write critically and review current literature in the chemical sciences; and
- Exhibit a comprehensive knowledge of the fundamental theories, concepts and skills necessary in the chemical sciences.

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 Achievement Test (MFAT) 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.

Specific Program 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. Students minoring in chemistry are required to earn a grade of “C” or better in all of the chemistry courses applying to the minor.
- 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.
- 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 take an exit examination during the senior year, covering the undergraduate chemistry curriculum.

Specific Core Requirements

Course	Title	Credits
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
CHEM 170	Academic Orientation	0.5
CHEM 301 & 301L	Organic Chemistry I and Organic Chemistry Lab I	5
CHEM 302 & 302L	Organic Chemistry II and Organic Chemistry Lab II	5
CHEM 317 & 317L	Quantitative Analysis and Quantitative Analysis Lab	5
CHEM 321	Physical Chemistry I	3

CHEM 322	Physical Chemistry II	3
CHEM 370	Academic Enrichment	0.5
CHEM 419 & 419L	Instrumental Analysis and Instrumental Analysis Lab	5
CHEM 420 & 420L	Inorganic Chemistry and Inorganic Chemistry Lab	4
CHEM 493	Seminar	1
Total Credits		**42**

Specific Concentration Requirements

Course	Title	Credits
BIOL 100 & 100L	Principles of Biology (GT-SC2) and Principles of Biology Lab (GT-SC1)	4
BIOL 121 & 121L	Environmental Conservation (GT-SC2) and Environmental Conservation Lab (GT-SC1)	4
ED 444	Teaching Secondary Science	4
GEOL 101 & 101L	Earth Science (GT-SC2) and Earth Science Lab (GT-SC1)	4
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
Total Credits		**36**

Specific Requirements for the Secondary and K-12 Teaching Endorsements/Minor

The student must complete an appropriate major and the following Education courses:

Course	Title	Credits
Select one of the following:		3
PSYC 151	Human Development (GT-SS3)	3
PSYC 251	Childhood and Adolescence	3
PSYC 342	Educational Psychology	3
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology [2]	3
ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
RDG 435	Disciplinary Literacy [3, 5]	4
Special Methods in Endorsement Areas (Prerequisites - Admission to Education) [5]		4
ED 412	Teaching Diverse Learners [4, 5]	3
ED 485	Capstone Seminar in Education	1
ED 488 or ED 489	Student Teaching Secondary Student Teaching K-12	12
Total Credits [3]		37-40

1. Music students may take PSYC 151 Human Development (GT-SS3) (3 c.h.)or PSYC 251 Childhood and Adolescence (3 c.h.).
2. Music Education students may complete MUS 103 Music and Computer Technology I (1 c.h.) and MUS 306 Technology for Music Educators (2 c.h.) for ED 280 Educational Media and Technology (3 c.h.).
3. English/Language Arts student must also complete RDG 410 Teaching Reading (3 c.h.)
4. Physical Education students may complete EPER 465 Adapted Physical Education (3 c.h.) or ED 412 Teaching Diverse Learners (3 c.h.).
5. GPA of 2.6 required

Chemistry: ACS Certified Concentration, Bachelor of Science

The major in Chemistry leads to a Bachelor of Science (BS) degree. The major is a rigorous, experimental science degree that provides a solid foundation in the major core areas of chemistry: analytical, biochemistry, inorganic, organic, and physical. The major prepares students for careers in various areas of chemistry, including basic chemical research, environmental and water quality labs, forensic chemistry, as well as for professional schools (Medical, Dental, Veterinary, Phamacy, etc.) and graduate school in the chemical sciences.

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:
  a. Basic Chemistry
  b. ACS Certified Curriculum
  c. Biochemistry
  d. Environmental Chemistry
  e. Chemistry/Teacher Certification
  f. Double Major
  g. Chemistry Minor

Expected Student Outcomes

Chemistry graduates are expected to:

- Understand the concept of and be able to apply the scientific method to problem solution;
- Understand classifications of chemical compounds, general reaction types and quantitative aspects of stoichiometry as applied to chemical reactions;
- Apply basic knowledge of related fields such as mathematics and physics to problem solving, methods of analysis and use of numerical data in the chemical sciences;
- Demonstrate a knowledge of basic laboratory skills, methods and equipment used in chemistry for observation and analysis of chemical systems;
- Read, think and write critically and review current literature in the chemical sciences; and

- Exhibit a comprehensive knowledge of the fundamental theories, concepts and skills necessary in the chemical sciences.

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 Achievement Test (MFAT) 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.

Specific Program 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. Students minoring in chemistry are required to earn a grade of "C" or better in all of the chemistry courses applying to the minor.
- 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.
- 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 take an exit examination during the senior year, covering the undergraduate chemistry curriculum.

Specific Core Requirements

Course	Title	Credits
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
CHEM 170	Academic Orientation	0.5
CHEM 301 & 301L	Organic Chemistry I and Organic Chemistry Lab I	5
CHEM 302 & 302L	Organic Chemistry II and Organic Chemistry Lab II	5
CHEM 317 & 317L	Quantitative Analysis and Quantitative Analysis Lab	5
CHEM 321	Physical Chemistry I	3
CHEM 322	Physical Chemistry II	3
CHEM 370	Academic Enrichment	0.5
CHEM 419 & 419L	Instrumental Analysis and Instrumental Analysis Lab	5
CHEM 420 & 420L	Inorganic Chemistry and Inorganic Chemistry Lab	4
CHEM 493	Seminar	1
Total Credits		**42**

Specific Concentration Requirements

Course	Title	Credits
Required Chemistry Core		
Chemistry Core		42
Required Concentration Courses		
CHEM 323	Experimental Physical Chemistry	2
CHEM 411	Biochemistry I	3
CHEM 421	Advanced Inorganic Chemistry	3
CHEM 492	Research	1
Approved Chemistry Electives		
Select 6 credits		6
Other Required Courses		
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
Institutional and General Education		
Select 24 credits		24
Free Electives		
Select 19 credits		19
Total Credits		**120**

Chemistry: Basic Chemistry Concentration, Bachelor of Science

The major in Chemistry leads to a Bachelor of Science (BS) degree. The major is a rigorous, experimental science degree that provides a solid foundation in the major core areas of chemistry: analytical, biochemistry, inorganic, organic, and physical. The major prepares students for careers in various areas of chemistry, including basic chemical research, environmental and water quality labs, forensic chemistry, as well as for professional schools (Medical, Dental, Veterinary, Phamacy, etc.) and graduate school in the chemical sciences.

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:
  a. Basic Chemistry
  b. ACS Certified Curriculum

c. Biochemistry
d. Environmental Chemistry
e. Chemistry/Teacher Certification
f. Double Major
g. Chemistry Minor

Expected Student Outcomes

Chemistry graduates are expected to:

- Understand the concept of and be able to apply the scientific method to problem solution;
- Understand classifications of chemical compounds, general reaction types and quantitative aspects of stoichiometry as applied to chemical reactions;
- Apply basic knowledge of related fields such as mathematics and physics to problem solving, methods of analysis and use of numerical data in the chemical sciences;
- Demonstrate a knowledge of basic laboratory skills, methods and equipment used in chemistry for observation and analysis of chemical systems;
- Read, think and write critically and review current literature in the chemical sciences; and
- Exhibit a comprehensive knowledge of the fundamental theories, concepts and skills necessary in the chemical sciences.

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 Achievement Test (MFAT) 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.

Specific Program 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. Students minoring in chemistry are required to earn a grade of "C" or better in all of the chemistry courses applying to the minor.
- 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.
- 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 take an exit examination during the senior year, covering the undergraduate chemistry curriculum.

Specific Core Requirements

Course	Title	Credits
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
CHEM 170	Academic Orientation	0.5
CHEM 301 & 301L	Organic Chemistry I and Organic Chemistry Lab I	5
CHEM 302 & 302L	Organic Chemistry II and Organic Chemistry Lab II	5
CHEM 317 & 317L	Quantitative Analysis and Quantitative Analysis Lab	5
CHEM 321	Physical Chemistry I	3
CHEM 322	Physical Chemistry II	3
CHEM 370	Academic Enrichment	0.5
CHEM 419 & 419L	Instrumental Analysis and Instrumental Analysis Lab	5
CHEM 420 & 420L	Inorganic Chemistry and Inorganic Chemistry Lab	4
CHEM 493	Seminar	1
Total Credits		**42**

Specific Concentration Requirements

Course	Title	Credits
Required Chemistry Core		
Chemistry Core		42
Required Concentration Courses		
CHEM 323	Experimental Physical Chemistry	2
CHEM 311	Biochemistry Survey	3
or CHEM 411	Biochemistry I	
Approved Chemistry Electives		
Select 4 credits		4
Other Required Courses		
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
Institutional and General Education Courses		
Select 24 credits		24
Free Electives		
Select 25 credits		25
Total Credits		**120**

Chemistry: Biochemistry Concentration, Bachelor of Science

The major in Chemistry with emphasis in Biochemistry leads to a Bachelor of Science (BS) degree. The major is a rigorous, experimental

science degree at the interface of biology and chemistry, and includes a strong background in the other core areas of chemistry: analytical, inorganic, organic, and physical. The major prepares students for careers in various areas of chemistry, especially biological chemistry, biomedical and pharmaceutical research, forensic chemistry, agrochemistry, and food science, as well as for professional schools (Medical, Dental, Veterinary, Pharmacy, etc.) and graduate school in the biological, biochemical, and biomedical sciences.

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:
  a. Basic Chemistry
  b. ACS Certified Curriculum
  c. Biochemistry
  d. Environmental Chemistry
  e. Chemistry/Teacher Certification
  f. Double Major
  g. Chemistry Minor

Expected Student Outcomes

Chemistry graduates are expected to:

- Understand the concept of and be able to apply the scientific method to problem solution;
- Understand classifications of chemical compounds, general reaction types and quantitative aspects of stoichiometry as applied to chemical reactions;
- Apply basic knowledge of related fields such as mathematics and physics to problem solving, methods of analysis and use of numerical data in the chemical sciences;
- Demonstrate a knowledge of basic laboratory skills, methods and equipment used in chemistry for observation and analysis of chemical systems;
- Read, think and write critically and review current literature in the chemical sciences; and
- Exhibit a comprehensive knowledge of the fundamental theories, concepts and skills necessary in the chemical sciences.

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 Achievement Test (MFAT) 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.

Specific Program 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. Students minoring in chemistry are required to earn a grade of "C" or better in all of the chemistry courses applying to the minor.
- 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.
- 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 take an exit examination during the senior year, covering the undergraduate chemistry curriculum.

Specific Core Requirements

Course	Title	Credits
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
CHEM 170	Academic Orientation	0.5
CHEM 301 & 301L	Organic Chemistry I and Organic Chemistry Lab I	5
CHEM 302 & 302L	Organic Chemistry II and Organic Chemistry Lab II	5
CHEM 317 & 317L	Quantitative Analysis and Quantitative Analysis Lab	5
CHEM 321	Physical Chemistry I	3
CHEM 322	Physical Chemistry II	3
CHEM 370	Academic Enrichment	0.5
CHEM 419 & 419L	Instrumental Analysis and Instrumental Analysis Lab	5
CHEM 420 & 420L	Inorganic Chemistry and Inorganic Chemistry Lab	4
CHEM 493	Seminar	1
Total Credits		**42**

Specific Concentration Requirements

Course	Title	Credits
Required Chemistry Core		
Chemistry Core		42
Required Concenration Courses		
CHEM 411	Biochemistry I	3

CHEM 412 & 412L	Biochemistry II and Biochemistry II Lab	5
Approved Chemistry Electives		
Select 3 credits, one of the following is strongly suggested:		3
CHEM 492	Research	3
CHEM 495	Independent Study	3
Other Required Courses		
BIOL 181 & 181L	College Biology I/Organismal Bio (GT-SC2) and College Biology I/Organismal Bio Lab (GT-SC1)	4
BIOL 182 & 182L	College Biology II/Cellular Biology (GT-SC2) and College Biology II/Cellular Bio Lab (GT-SC1)	4
BIOL 301 & 301L	General Microbiology and General Microbiology Lab	5
BIOL 350	Mendelian and Population Genetics	2
BIOL 351 & 351L	Molecular Biology & Genetics and Molecular Biology & Genetics Laboratory	4
BIOL 412 & 412L	Advanced Cellular Biology and Advanced Cellular Biology Lab	4
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
Institutional and General Education		
Select 24 credits		24
Total Credits		**120**

Chemistry: Environmental Chemistry Concentration, Bachelor of Science

The major in Chemistry leads to a Bachelor of Science (BS) degree. The major is a rigorous, experimental science degree that provides a solid foundation in the major core areas of chemistry: analytical, biochemistry, inorganic, organic, and physical. The emphasis in environmental chemistry prepares students for careers in environmental chemistry; lake, stream, and groundwater quality assessment. The underlying chemistry major qualifies the graduate for careers in various additional areas of chemistry, as well as for professional schools (Medical, Dental, Veterinary, Phamacy, etc.) and graduate school in the chemical sciences.

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:
  a. Basic Chemistry
  b. ACS Certified Curriculum
  c. Biochemistry
  d. Environmental Chemistry
  e. Chemistry/Teacher Certification
  f. Double Major
  g. Chemistry Minor

Expected Student Outcomes

Chemistry graduates are expected to:

- Understand the concept of and be able to apply the scientific method to problem solution;
- Understand classifications of chemical compounds, general reaction types and quantitative aspects of stoichiometry as applied to chemical reactions;
- Apply basic knowledge of related fields such as mathematics and physics to problem solving, methods of analysis and use of numerical data in the chemical sciences;
- Demonstrate a knowledge of basic laboratory skills, methods and equipment used in chemistry for observation and analysis of chemical systems;
- Read, think and write critically and review current literature in the chemical sciences; and
- Exhibit a comprehensive knowledge of the fundamental theories, concepts and skills necessary in the chemical sciences.

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 Achievement Test (MFAT) 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.

Specific Program 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. Students minoring in chemistry are required to earn a grade of “C” or better in all of the chemistry courses applying to the minor.
- 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.
- 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 take an exit examination during the senior year, covering the undergraduate chemistry curriculum.

Specific Core Requirements

Course	Title	Credits
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
CHEM 170	Academic Orientation	0.5
CHEM 301 & 301L	Organic Chemistry I and Organic Chemistry Lab I	5
CHEM 302 & 302L	Organic Chemistry II and Organic Chemistry Lab II	5
CHEM 317 & 317L	Quantitative Analysis and Quantitative Analysis Lab	5
CHEM 321	Physical Chemistry I	3
CHEM 322	Physical Chemistry II	3
CHEM 370	Academic Enrichment	0.5
CHEM 419 & 419L	Instrumental Analysis and Instrumental Analysis Lab	5
CHEM 420 & 420L	Inorganic Chemistry and Inorganic Chemistry Lab	4
CHEM 493	Seminar	1
Total Credits		**42**

Specific Concentration Requirements

Course	Title	Credits
Required Chemistry Core		
Chemistry Core		42
Required Concentration Courses		
CHEM 125 & 125L	Environmental Science (GT-SC2) and Environmental Science Laboratory (GT-SC1)	4
CHEM 311	Biochemistry Survey	3
CHEM 425 & 425L	Environmental Chemistry and Environmental Chemistry Lab	5
Approved Chemistry Electives		
Select 4 credits, the following are encouraged elective options:		4
CHEM 292	Research	1-3
CHEM 492	Research	1-3
MATH 156	Introduction to Statistics (GT-MA1)	3
Other Required Courses		
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
BIOL 181 & 181L	College Biology I/Organismal Bio (GT-SC2) and College Biology I/Organismal Bio Lab (GT-SC1)	4
BIOL 182 & 182L	College Biology II/Cellular Biology (GT-SC2) and College Biology II/Cellular Bio Lab (GT-SC1)	4
BIOL 301 & 301L	General Microbiology and General Microbiology Lab	5
BIOL 465	Environmental Toxicology	3
Institutional and General Education		
Select 24 credits		24
Free Electives		
Select 2 credits		2
Total Credits		**120**

Engineering Technology & Construction Management Department

The unit of Engineering Technology and Construction Management consists of two BS programs: the Civil Engineering Technology program and the Construction Management program. The unit also offers construction management certificate programs and is a joint participant in offering an integrated 3+2 Baccalaureate (BS) in Construction Management and Master in Business Administration (MBA) program.

Civil Engineering Technology Program

This undergraduate engineering technology program leads to a Bachelor of Science in Civil Engineering Technology (BSCET) degree. The BSCET degree program prepares graduates for entry level positions to support civil engineering activities associated with the design, construction, operation and maintenance of structures, highways, water supply and disposal systems, and surface water drainage.

Construction Management Program

The Construction Management BS Degree is designed to prepare students for entry level positions in the heavy/civil or Commercial/ Residential construction management industry.

Construction Management Certificate Options

Non-Construction Management Majors who wish to build their construction management knowledge in various discipline specific areas can obtain a certificate in any of the following Construction Management specialization areas:

- Construction Manager Certificate
- Estimating & Planning Construction Costs Certificate
- Advanced Construction Manager Certificate

Academic Programs

Undergraduate Programs

- Civil Engineering Technology, Bachelor of Science in Civil Engineering Technology (p. 447)
- Construction Management, Bachelor of Science (p. 448)

Minors

- Construction Management, Minor (p. 450)

Certificates

- Construction Procurement, Certificate (p. 450)
- Construction Project Manager, Certificate (p. 451)
- Construction Safety, Law, & Management, Certificate (p. 451)

- Estimating & Planning Construction Costs, Certificate (p. 450)
- Surveying & Modeling, Certificate (p. 451)

Civil Engineering Technology (CET)

CET 101 Intro to Civil Engineering Technology 2(1-2)
Fall.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CET 102 Surveying I 3(1-4)
Fall.
Beginning course in plane surveying; covers proper chaining techniques, care and use of engineering levels, differential leveling, traversing, and construction surveying.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CET 103 Surveying II 3(1-4)
Spring.
Introduction to land, topographic, and construction surveying.
Prerequisite: CET 102.
Corequisite: None.
Registration Information: Permission of instructor.

CET 115 Civil Drafting I 3(1-4)
Fall.
An introduction to basic drafting, AutoCAD and Structural Detail drafting.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CET 116 Civil Drafting II 3(1-4)
Spring.
An introduction to maps, traverses, contours, plans and profiles, cut and fills. An introduction to architectural plans, elevations and section.
Prerequisite: CET 115.
Corequisite: None.
Registration Information: None.

CET 202 Statics 3(3-0)
Fall.
Basic concepts and application of static forces, couples, resultants, equilibrium, friction, frames, trusses, free body diagrams, and centroids.
Prerequisite: MATH 122 or MATH 124.
Corequisite: None.
Registration Information: None.

CET 206 Strength of Materials 4(3-2)
Spring.
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.
Corequisite: None.
Registration Information: None.

CET 207 Construction Materials and Methods 3(3-0)
Fall.
Properties, uses and methods of assembly of building materials as they apply to the construction industry.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CET 208 Concrete and Asphalt Materials 3(2-2)
Spring.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CET 222 Dynamics 3(3-0)
Spring.
A study of the basic equations of motion, kinematics, kinetics, momentum, potential energy, work, and highway dynamics.
Prerequisite: CET 202.
Corequisite: None.
Registration Information: None.

CET 226 Engineering Problem Solving 2(1-2)
Fall.
An introduction to computer programming to solve engineering problems that apply to the complete spectrum of civil engineering technology courses.
Prerequisite: CIS 101 and CIS 104 and MATH 120.
Corequisite: None.
Registration Information: None.

CET 303 Construction Management 3(3-0)
Spring.
Job specifications, contractor, organization, bonding, contracts, insurance and labor relations.
Prerequisite: CET 207.
Corequisite: None.
Registration Information: None.

CET 304 Building Cost Estimating 3(3-0)
As Needed.
Estimating related to building construction industry. Quantity take-off, labor and material costs, records and assembling a general contractor's bid.
Prerequisite: CET 303.
Corequisite: None.
Registration Information: None.

CET 305 Heavy/Highway Cost Estimating 3(3-0)
Fall.
Estimating relating to heavy and highway construction. Covers heavy equipment selection and use, project scheduling and production rates.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing. Permission of instructor.

CET 312 Route Surveying 3(2-2)
As Needed.
Highway and route surveys, horizontal and vertical curves, grades, slope staking, and earthwork.
Prerequisite: CET 103 and MATH 124.
Corequisite: None.
Registration Information: None.

CET 315 Soil Mechanics Technology 3(2-2)
Spring.
Basic principles of soil mechanics and foundation design as they apply to design and construction. ATSM field tests will be done in the laboratory.
Prerequisite: CET 206.
Corequisite: None.
Registration Information: None.

CET 316 Structural Analysis 3(3-0)
Fall.
Introduction to the analysis of statically determinate and indeterminate structures.
Prerequisite: CET 206 and MATH 126 and PHYS 201 and PHYS 201L.
Corequisite: None.
Registration Information: None.

CET 317 Hydraulics 3(2-2)
Fall.
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 and MATH 126 and PHYS 201 and PHYS 201L.
Corequisite: None.
Registration Information: None.

CET 372 Traffic Analysis and Control 3(2-2)
Spring.
Introduction to traffic engineering including traffic system characteristics, traffic studies, capacity analysis, and traffic control. Laboratory activities include traffic data collection and analysis.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CET 401 Land Surveying 3(3-0)
As Needed.
Boundary control, property descriptions, deeds, subdivisions, emphasizing the legal aspects of land law and surveying.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CET 404 (CE 404) Structural Steel Design 3(3-0)
Fall.
Structural steel design of beams, columns, girders and trusses to AISC standards.
Prerequisite: CE 331 or CET 316.
Corequisite: None.
Registration Information: None.

CET 405 (CE 405) Reinforced Concrete Design 3(3-0)
Spring.
Design of reinforced concrete beams, columns, girders and floor systems to conform to current ACI code.
Prerequisite: CE 331 or CET 316.
Corequisite: None.
Registration Information: None.

CET 412 (CE 412) Hydrology 3(3-0)
Spring.
Hydrologic cycle including precipitation, streamflow, ground-water runoff and the preparation of hydro graphs and frequency analysis.
Prerequisite: CE 351 or CET 317.
Corequisite: None.
Registration Information: None.

CET 414 Bridge Design 3(3-0)
As Needed.
Design of bridge slabs, beams, abutments, wingwalls, piers, and footings.
Prerequisite: CET 316.
Corequisite: None.
Registration Information: None.

CET 415 (CE 415) Water & Sewer System Design 3(3-0)
Fall.
Fundamental principles of water supply and sewage design.
Prerequisite: CE 351 or CET 317 and CHEM 111.
Corequisite: None.
Registration Information: None.

CET 455 Senior Project Seminar 1(1-0)
Fall.
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: None.
Corequisite: None.
Registration Information: None.

CET 456 Senior Project 3(1-4)
Spring.
Practical realistic projects relating to CET discipline are selected for design, analysis, and execution. Students prepare reports and make oral presentations.
Prerequisite: CET 455.
Corequisite: None.
Registration Information: None.

CET 473 (CE 473) Highway Design 3(3-0)
Fall.
A study of highway planning and design.
Prerequisite: CE 321 or CET 315 and CE 341 or CET 372 and CET 208 and MATH 126.
Corequisite: None.
Registration Information: None.

CET 475 Engineer-In-Training Preparation 3(3-0)
Spring.
This course is designed as preparation for the state Engineer-In-Training examination. Subjects include general engineering and civil engineering topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CET 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CET 495 Independent Study (1-3 V)
Fall, Spring, Summer.
Directed study for students interested in specific areas of CET.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing in CET. Permission of instructor. Repeatable (99).

CET 496 Cooperative Education Placement (1-4 V)
Fall, Spring, Summer.
Industrial cooperative education work experience under the direction of a field supervisor and faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

Construction Management (CM)

CM 101 Intro to Construction Management 2(1-2)
Fall.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CM 231 Statics and Structures 4(4-0)
Fall.
An introduction to statics, strength of materials, and theory of structures, its applications to building construction and the use of trigonometry in solution of statics problems.
Prerequisite: PHYS 201 and PHYS 201L.
Corequisite: None.
Registration Information: None.

CM 320 Soils in Construction 3(2-2)
Spring.
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.
Corequisite: None.
Registration Information: None.

CM 330 Wood Structural Systems 3(2-2)
Fall.
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.
Corequisite: None.
Registration Information: None.

CM 341 Concrete and Steel Structures 4(3-2)
Spring.
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.
Corequisite: None.
Registration Information: None.

CM 351 Construction Planning & Scheduling 3(2-2)
Spring.
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 303.
Corequisite: None.
Registration Information: None.

CM 391 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CM 437 LEED Lab 3(2-2)
As Needed.
LEED Lab is designed to further people-wide focus on sustainability and green building through hands-on applications for LEED (Leadership in Energy, Environment, and Design) certification.
Prerequisites: CET 303.
Corequisites: None.
Registration Information: None.

CM 445 Construction Safety 2(2-0)
Spring.
The study of safe construction techniques, workers compensation insurance, OSHA regulations and requirements, cost of accidents, and ethical conduct regarding safety.
Prerequisite: CET 207.
Corequisite: None.
Registration Information: None.

CM 451 Mechanical & Electrical Systems 4(4-0)
Fall.
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: CET 207 and PHYS 201.
Corequisite: None.
Registration Information: None.

CM 461 Construction Law 3(3-0)
Fall.
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.
Corequisite: None.
Registration Information: None.

CM 465 Construction Accounting & Finance 3(3-0)
Spring.
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: ACCT 201.
Corequisite: None.
Registration Information: None.

CM 475 Senior Project 3(1-4)
Spring.
An exercise in construction project analysis, cost estimating, scheduling, and the preparation and professional presentation of a project bid package for an organization.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing in CM. Must be within 2 semesters of graduation.

CM 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CM 495 Independent Study (1-3 V)
Fall, Spring.
Directed study for students interested in a specific area of CM.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (2).

Civil Engineering Technology, Bachelor of Science in Civil Engineering Technology

The major in civil engineering technology leads to a Bachelor of Science in Civil Engineering Technology (BSCET) Degree. This program is accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org, under the General Criteria and the Civil Engineering Technology and Similarly Named Programs Program Criteria.

Admission

Students are typically admitted into the Civil Engineering Technology (CET) program as high school graduates, transfer students from other colleges, or transfer students from other units at this university. Therefore, students who join the CET program must meet the Colorado State University Pueblo admission requirements as described under admission requirements in this catalog.

Program Education Objectives

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

- Prepared to apply established engineering principles and standards of practice in developing solutions to civil engineering problems, and
- Prepared for successful careers in civil engineering by providing them with the ability to contribute to engineering teams in various practice areas including
  - Civil engineering analysis and design,
  - Construction planning, operations and management,
  - Surveying and standard testing,
  - Technical documentation, and
  - Systems operations, maintenance, and improvement.

Program Emphasis

In order to enable graduates to attain the CET program educational objectives, the CET program provides instruction in the following curricular areas:

- Production of drawings, reports, quantity estimates, and other documents related to civil engineering;
- Conducting standardized field and laboratory tests related to civil engineering;
- Conducting land surveying to obtain civil engineering data and/or to develop construction layouts
- Using fundamental computational methods and elementary analytical techniques applicable to the civil engineering sub-disciplines;
- Preparation of civil engineering design documents for construction;
- Economic analyses and cost estimates for planning, design, construction, operation of civil engineering projects;
- Selection of appropriate engineering materials and practices; and
- Performance of standard analysis and design in the areas of structural, transportation and water systems.

Student Learning Outcomes

- Apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly defined engineering problems appropriate to the discipline;
- Design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;
- Apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
- Conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
- Function effectively as a member as well as a leader on technical teams.

Outcomes Assessment Activities

The program has a documented processes for assessing and evaluating the extent to which student outcomes are being attained. Assessment of student outcomes takes place in individual courses through a variety of methodologies including assigned homework, tests, semester exams, lab reports, oral presentations, and capstone activities. The results of the evaluations are used as input for program improvement actions.

The CET curriculum consists of courses listed under the following major categories:

Math, Science, & Computer Courses

Course	Title	Credits
CIS 100	Introduction to Word	1
CIS 103	Introduction to PowerPoint	1
CIS 104	Introduction to Excel Spreadsheets	1
CHEM 111 & 111L	Principles of Chemistry (GT-SC2) and Principles of Chemistry Lab (GT-SC1)	4
MATH 120	College Algebra (GT-MA1)	3.0
MATH 124	Pre-Calculus (GT-MA1)	5
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
PHYS 201 & 201L	Principles of Physics I (GT-SC2) and Principles of Physics Lab I (GT-SC1)	4
Total Credits		**24**

Technical Sciences for Civil Engineering Technology

Course	Title	Credits
CET 202	Statics	3
CET 206	Strength of Materials	4
CET 222	Dynamics	3

CET 226	Engineering Problem Solving	2
Total Credits		**12**

Civil Engineering Technology Courses

Course	Title	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 and Methods	3
CET 208	Concrete and 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 System Design	3
CET 455	Senior Project Seminar	1
CET 456	Senior Project	3
CET 473	Highway Design	3
Total Credits		**54**

Civil Engineering Technology Elective Courses

Course	Title	Credits
Select two of the following:		6
CET 303	Construction Management	3
CET 304	Building Cost Estimating	3
CET 312	Route Surveying	3
CET 401	Land Surveying	3
CET 414	Bridge Design	3
CET 475	FE (Civil Engineering) Exam Preparation	3
CET 491	Special Topics (credits vary)	1-3
CET 495	Independent Study (credits vary)	1-3
Total Credits		**6**

Technical Electives

Course	Title	Credits
Technical Elective		4
Total Credits		**124**

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.

Specific Graduation 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.
- 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.

Civil Engineering, Minor

Specific Admission Requirements

Student must be a current engineering (mechatronics and industrial) undergraduate student.

Student Learning Outcomes

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Specific Program Requirements

Course	Title	Credits
CET 208	Concrete and Asphalt Materials	3
CE 321	Geotechnical Engineering I	3
CE 341	Introduction to Transportation Engineering	3
CE 351	Hydraulics with Lab	3
Technical Electives	Select any 9 hours from CE 331, CE 404, CE 405, CE 412, CE 415, CE 421, CE 473, and similar CE courses with program advisor approval	9
Total Credits		**21**

Specific Graduation Requirements

A requirement of 21 credit hours of advisor approved CE or CET courses with the minimum GPA of 2.0.

Construction Management, Bachelor of Science

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.

Mission Statement

Producing construction professionals by providing construction management knowledge and skills to pursue multiple career and educational paths.

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.

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.

Admission

Students are typically admitted into the Construction Management program as high school graduates, transfer students from other colleges, or transfer studentss from other units at this university. Therefore, students who join the Construction Management program must meet the Colorado State University-Pueblo admission requirements as described under admission requirements in this catalog.

Student Learning Outcomes

Students who successfully complete the CM program are expected to have the ability to:

- Apply knowledge, techniques, skills, and tools of the construction industry in construction activities;
- Select and apply knowledge of mathematics, science, and technology to construction problems;
- Perform standard tests, organize and interpret test data, and apply test results to improve construction processes;
- Function effectively as members or leaders on construction teams;
- Communicate effectively regarding subjects related to construction activities; and
- Demonstrate an understanding of professional and ethical responsibilities.

Outcomes Assessment Activities

- The program has a documented processes for assessing and evaluating the extent to which student outcomes are being attained. Assessment of student outcomes takes place in individual courses through a variety of methodologies including assigned homework, tests, semester exams, lab reports, oral presentations, and capstone activities. The results of the evaluations are used as input for program improvement actions.
- 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.

Specific Program Requirements

Course	Title	Credits
Skills Component		
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
Knowledge Component		
CID 103	Speaking & Listening	3
General Education: History		3
General Education: Humanities		6
Social Sciences (6 hours listed under Business) [1]		
Math and Sciences		
MATH 120	College Algebra (GT-MA1)	3
MATH 156	Introduction to Statistics (GT-MA1)	3
PHYS 201 & 201L	Principles of Physics I (GT-SC2) and Principles of Physics Lab I (GT-SC1)	4
Select one of the following:		4
CHEM 111 & 111L	Principles of Chemistry (GT-SC2) and Principles of Chemistry Lab (GT-SC1)	4
GEOL 101 & 101L	Earth Science (GT-SC2) and Earth Science Lab (GT-SC1)	4
Business and Management		
ACCT 201	Principles of Financial Accounting	3
BSAD 270	Business Communications	3
BSAD 302	Ethics in Business	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1) [1]	3
MGMT 201	Principles of Management	3
Introduction to Computers		
CIS 100	Introduction to Word	1
CIS 103	Introduction to PowerPoint	1
CIS 104	Introduction to Excel Spreadsheets	1
Major Courses		
CET 102	Surveying I	3
CET 115	Civil Drafting I	3
CET 207	Construction Materials and 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 437	LEED Lab	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
Technical and Management Electives		

Select 6 credits from ACCT, BSAD, CET, CM, EN, FIN, MGMT or MKTG	6
Upper Division Technical and Management Electives	
Select 3 credits from ACCT, BSAD, CET, CM, EN, FIN, MGMT or MKTG	3
Total Credits	**120**

[1] ECON 201 Principles of Macroeconomics (GT-SS1) (3 c.h.) and ECON 202 Principles of Microeconomics (GT-SS1) (3 c.h.) are also counting for the Social Science General Education Requirement.

Specific Graduation 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.
- 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.

Estimating & Planning Construction Costs, Certificate

Student Learning Outcomes

Recipients of a certificate will gain a deeper understanding of the current major cost issues effecting the construction industry. The student will be exposed to the important skills and knowledge necessary to be a manager in today's construction industry.

The Estimating & Planning Construction Costs Certificate is intended to enhance a current construction industry professional's body of knowledge with advanced construction industry skills. Interested students must consult with a Construction Management Program approved advisor prior to registration to ensure adequate entry level skills.

Course	Title	Credits
CET 304	Building Cost Estimating	3
CET 305	Heavy/Highway Cost Estimating	3
CM 351	Construction Planning & Scheduling	3
Total Credits		**9**

Construction Management, Minor

Specific Admission Requirements

Interested applicants should consult with the program advisor prior to registration to ensure adequate entry level skills. The Construction Management Minor is open to all majors, which consists of 7 courses and a total of 20 credit hours. A minor cannot be completed independently and must be completed simultaneously with a major degree program.

Student Learning Outcomes

- Apply knowledge, techniques, skills, and tools of the construction industry in construction activities.
- Select and apply knowledge of mathematics, science, and technology to construction problems.
- Perform standard tests, organize, and interpret test data, and apply test results to improve construction processes.
- Function effectively as members or leaders on construction teams.
- Communicate effectively regarding subjects related to construction activities; and
- Demonstrate an understanding of professional and ethical responsibilities.

Specific Program Requirements

Course	Title	Credits
CET 207	Construction Materials and Methods	3
CET 303	Construction Management	3
CET 437	LEED Lab	3
CM 351	Construction Planning & Scheduling	3
CM 445	Construction Safety	2
Select one course from the following:		3
CET 304	Building Cost Estimating	3
CET 305	Heavy/Highway Cost Estimating	3
Select one course from the following:		3
CM 461	Construction Law	3
CM 465	Construction Accounting & Finance	3
Total Credits		**20**

Specific Graduation Requirements

Students must complete 7 courses listed in the curriculum section, which totals 20 credit hours with a minimum GPA of 2.0.

Construction Procurement, Certificate

Specific Admission Requirements

The certificate is open to anyone, including the general public. Interested applicants should consult with the construction management program advisor prior to registration to ensure adequate entry level skills.

Non-Construction Management Majors who wish to build their construction management knowledge in various discipline specific areas can obtain a certificate in any of the following Construction Management concentration areas:

- Construction Procurement, Certificate (p. 450)
- Construction Project Manager, Certificate (p. 451)
- Construction Safety, Law, & Management, Certificate (p. 451)
- Surveying & Modeling, Certificate (p. 451)

Student Learning Outcomes

- Apply knowledge, techniques, skills, and tools of the construction industry in construction activities.
- Select and apply knowledge of mathematics, science, and technology to construction problems.
- Perform standard tests, organize, and interpret test data, and apply test results to improve construction processes.
- Function effectively as members or leaders on construction teams.
- Communicate effectively regarding subjects related to construction activities; and
- Demonstrate an understanding of professional and ethical responsibilities.

Specific Program Requirements

Course	Title	Credits
CM 351	Construction Planning & Scheduling	3
CM 465	Construction Accounting & Finance	3
Select one of the following:		**3**
CET 304	Building Cost Estimating	3
CET 305	Heavy/Highway Cost Estimating	3
Total Credits		**9**

Construction Project Manager, Certificate

Specific Admission Requirements

The certificate is open to anyone, including the general public. Interested applicants should consult with the construction management program advisor prior to registration to ensure adequate entry level skills.

Non-Construction Management Majors who wish to build their construction management knowledge in various discipline specific areas can obtain a certificate in any of the following Construction Management concentration areas:

- Construction Procurement, Certificate (p. 450)
- Construction Project Manager, Certificate (p. 451)
- Construction Safety, Law, & Management, Certificate (p. 451)
- Surveying & Modeling, Certificate (p. 451)

Student Learning Outcomes

- Apply knowledge, techniques, skills, and tools of the construction industry in construction activities.
- Select and apply knowledge of mathematics, science, and technology to construction problems.
- Perform standard tests, organize, and interpret test data, and apply test results to improve construction processes.
- Function effectively as members or leaders on construction teams.
- Communicate effectively regarding subjects related to construction activities; and
- Demonstrate an understanding of professional and ethical responsibilities.

Specific Program Requirements

Course	Title	Credits
CET 303	Construction Management	3
CM 351	Construction Planning & Scheduling	3
CM 461	Construction Law	3
Total Credits		**9**

Construction Safety, Law, & Management, Certificate

Specific Admission Requirements

The certificate is open to anyone, including the general public. Interested applicants should consult with the construction management program advisor prior to registration to ensure adequate entry level skills.

Non-Construction Management Majors who wish to build their construction management knowledge in various discipline specific areas can obtain a certificate in any of the following Construction Management concentration areas:

- Construction Procurement, Certificate (p. 450)
- Construction Project Manager, Certificate (p. 451)
- Construction Safety, Law, & Management, Certificate (p. 451)
- Surveying & Modeling, Certificate (p. 451)

Student Learning Outcomes

- Apply knowledge, techniques, skills, and tools of the construction industry in construction activities.
- Select and apply knowledge of mathematics, science, and technology to construction problems.
- Perform standard tests, organize, and interpret test data, and apply test results to improve construction processes.
- Function effectively as members or leaders on construction teams.
- Communicate effectively regarding subjects related to construction activities; and
- Demonstrate an understanding of professional and ethical responsibilities.

Specific Program Requirements

Course	Title	Credits
CET 303	Construction Management	3
CM 101	Intro to Construction Management	2
CM 445	Construction Safety	2
CM 461	Construction Law	3
Total Credits		**10**

Surveying & Modeling, Certificate

Specific Admission Requirements

The certificate is open to anyone, including the general public. Interested applicants should consult with the construction management program advisor prior to registration to ensure adequate entry level skills.

Non-Construction Management Majors who wish to build their construction management knowledge in various discipline specific areas can obtain a certificate in any of the following Construction Management concentration areas:

- Construction Procurement, Certificate (p. 450)
- Construction Project Manager, Certificate (p. 451)
- Construction Safety, Law, & Management, Certificate (p. 451)
- Surveying & Modeling, Certificate (p. 451)

Student Learning Outcomes

- Apply knowledge, techniques, skills, and tools of the construction industry in construction activities.
- Select and apply knowledge of mathematics, science, and technology to construction problems.
- Perform standard tests, organize, and interpret test data, and apply test results to improve construction processes.
- Function effectively as members or leaders on construction teams.
- Communicate effectively regarding subjects related to construction activities; and
- Demonstrate an understanding of professional and ethical responsibilities.

Specific Program Requirements

Course	Title	Credits
CET 102	Surveying I	3
CET 103	Surveying II	3
CET 115	Civil Drafting I	3
Total Credits		**9**

Mathematics & Physics Department

Mathematics Program

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.

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.

Physics/Physical Science Program

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. A degree plan may be designed based on the student's interests through consultation with the advisor and the department chair.

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.

Academic Programs

Mathematics

Undergraduate Programs

- Math/Physics Double Major, Bachelor of Science (p. 459)
- Mathematics, Bachelor of Arts (p. 460)
- Mathematics, Bachelor of Science (p. 461)
- Mathematics: 7-12 Teacher Preparation Concentration, Bachelor of Arts (p. 462)
- Mathematics: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 463)

Minors

- Computational Mathematics, Minor (p. 459)
- Mathematics, Minor (p. 462)

Certificates

- Data Analytics, Certficate (p. 459)

Physics

Undergraduate Programs

- Math/Physics Double Major, Bachelor of Science (p. 459)
- Physics, Bachelor of Science (p. 464)
- Physics: 7-12 Physical Science Teacher Preparation Concentration, Bachelor of Science (p. 465)
- Physics: 7-12 Teacher Preparation Concentration, Bachelor of Science (p. 467)

Minors

- Physics, Minor (p. 465)

Mathematics (MATH)

MATH 091 Special Topics (1-4 V)
As Needed.
Special topics are offered to students in areas where regular course offerings are not available. This course does not count toward graduation.
Prerequisite: None.
Corequisite: None.
Registration Information: Satisfactory placement exam score. Repeatable (99).

MATH 096 College Prep Math 1 3(3-)
Fall, Spring.
Operations with real numbers. Solving and graphing linear equations with applications. Polynomial addition, subtraction, multiplication and division. This course does not count toward graduation.
Prerequisite: None.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.

MATH 097 College Prep Math 2 3(3-)
Fall, Spring.
Factoring polynomials, solving polynomial equations. Rational expressions and equations with applications. Inequalities and absolute value. Quadratic functions with applications. This course does not count towards graduation.
Prerequisite: MATH 096.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.

MATH 101 Introductory College Mathematics (GT-MA1) 3(3-0)
Fall, Spring, Summer.
Solving systems of linear equations. Introduction to functions. Operations with radical expressions. Solving radical equations. Exponential and logarithmic functions with applications.
Prerequisite: MATH 097.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.
(GT-MA1)

MATH 109 Mathematical Explorations (GT-MA1) (3 V)
Fall, Spring.
Emphasis on quantitative reasoning and problem solving. Topics chosen from: logic, sets, algebra, linear programming, probability, statistics, number theory, geometry, voting theory and graph theory.
Prerequisite: MATH 097.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.
(GT-MA1)

MATH 120 College Algebra (GT-MA1) 3(3-0)
Fall, Spring.
Solutions of algebraic equations, graphs of rational functions, exponential and logarithmic functions.
Prerequisite: MATH 101.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.
(GT-MA1)

MATH 122 College Trigonometry (3 V)
As Needed.
Trigonometric and circular functions, identities, inverse functions, vectors, complex numbers.
Prerequisite: MATH 120.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.

MATH 124 Pre-Calculus (GT-MA1) 5(5-0)
Fall, Spring.
Polynomial, rational, exponential and logarithmic functions; solution of systems of equations; trigonometric, circular and certain special functions.
Prerequisite: MATH 120.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.
(GT-MA1)

MATH 126 Calculus & Analytic Geometry I (GT-MA1) 5(5-0)
Fall, Spring.
Introduction to limits, continuity, differentiation and integration with selected applications.
Prerequisite: MATH 122 or MATH 124.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.
(GT-MA1)

MATH 156 Introduction to Statistics (GT-MA1) 3(3-0)
Fall, Spring, Summer.
Introduction to data analysis. Binomial and normal models. Sample statistics, confidence intervals, hypothesis tests, linear regression and correlation, and chi-square tests.
Prerequisite: MATH 101.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.
(GT-MA1)

MATH 191 Special Topics (1-5 V)
As Needed.
Special topics suitable for entry level math students.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor or department chair.
Repeatable (99).

MATH 207 Matrix and Vector Algebra with Applications 3(3-0)
Fall, Spring.
Systems of equations, matrices, inverses, determinants, eigenvalues and eigenvectors, scalar and cross-product, selected applications.
Prerequisite: MATH 124.
Corequisite: None.
Registration Information: None.

MATH 220 Quantitative Analysis for Business 4(4-0)
Fall, Spring, Summer.
An introduction to quantitative methods required for business studies, including linear programming, probability and statistics.
Prerequisite: MATH 101.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.

MATH 221 Applied Calc: An Intuitive Approach (GT-MA1) 4(4-0)
Fall, Spring.
Non-rigorous introduction to calculus with emphasis on applications and modeling in the life sciences, social and behavioral sciences and business.
Prerequisite: MATH 120.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.
(GT-MA1)

MATH 224 Calculus and Analytic Geometry II 5(5-0)
Fall, Spring.
Differentiation and integration of transcendental functions, infinite sequences and series, parametric curves, and applications.
Prerequisite: MATH 126.
Corequisite: None.
Registration Information: None.

MATH 242 Introduction to Computation 4(3-2)
Spring.
Computer programming and computation with applications. Loops, conditionals, data types and structores, I/O, functions debugging, testing, and documentation. Numerical, graphical, symbolic computation issues and projects.
Prerequisite: MATH 126.
Corequisite: None.
Registration Information: None.

MATH 291 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor and approval of the department chair. Repeatable (99).

MATH 295 Independent Study (1-5 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MATH 307 Introduction to Linear Algebra 4(4-0)
Spring.
A rigorous development of vector spaces and linear transformations.
Prerequisite: MATH 207 or MATH 224.
Corequisite: None.
Registration Information: None.

MATH 319 Number Theory (3 V)
Spring, Odd.
Divisibility, prime numbers, linear congruences, multiplicative functions, cryptology, primitive roots, and quadratic residues.
Prerequisite: MATH 224.
Corequisite: None.
Registration Information: None.

MATH 320 Introductory Discrete Mathematics 3(3-0)
Fall.
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: MATH 224.
Corequisite: None.
Registration Information: None.

MATH 325 Intermediate Calculus 4(4-0)
Fall.
Continuation of MATH 224. Vector valued functions and multivariable calculus.
Prerequisite: MATH 224.
Corequisite: None.
Registration Information: None.

MATH 330 Introduction to Higher Geometry (3 V)
Spring, Even.
Euclidean, hyperbolic, finite, and transformation geometries, models, and constructions.
Prerequisite: MATH 224.
Corequisite: None.
Registration Information: Permission of instructor.

MATH 337 Differential Equations I 3(3-0)
Spring.
First order differential equations, homogeneous and non-homogenous linear differential equations, introduction to the Laplace transform, applications.
Prerequisite: MATH 224.
Corequisite: None.
Registration Information: None.

MATH 338 Differential Equations II 3(3-0)
Fall, Odd.
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: MATH 337.
Corequisite: None.
Registration Information: MATH 325 is recommended as prerequisite.

MATH 342 Introduction to Numerical Analysis 3(3-0)
Spring, Even.
Numerical solutions of polynomial, differential, integral, and other equations using the computer.
Prerequisite: MATH 224.
Corequisite: None.
Registration Information: Programming language recommended. Permission of instructor.

MATH 345 Algorithms & Data Structures 4(3-2)
Spring, Odd.
An introduction to data structures, sorting, searching, recurrence relations and performance measures. Algorithms will be studied analytically and through computer implementation.
Prerequisite: MATH 224 and MATH 242.
Corequisite: None.
Registration Information: None.

MATH 350 Probability 3(3-0)
Spring.
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.
Corequisite: None.
Registration Information: None.

MATH 356 Statistics for Engineers & Scientists 3(3-0)
Fall.
Calculus-based introduction to statistical methods. Sampling distributions, hypothesis testing, linear regression, design of experiments using ANOVA. Data analysis with Minitab.
Prerequisite: MATH 350.
Corequisite: None.
Registration Information: None.

MATH 360 Elementary Mathematics Concepts I 3(3-0)
Fall.
Development of the real number system and related concepts, including sets, numeration systems, whole numbers, integers, number theory and algorithms.
Prerequisite: None.
Corequisite: None.
Registration Information: MATH 101 or MATH 109 recommended as prerequisite. Satisfactory placement score.

MATH 361 Elementary Mathematics Concepts II 3(3-0)
Spring.
Conceptual development of fractions, rational numbers, geometry, measurement, probability and statistics.
Prerequisite: MATH 360.
Corequisite: None.
Registration Information: Satisfactory placement score.

MATH 362 Problem Solving for K-6 Teachers 3(3-0)
Fall.
This course focuses on the process of mathematical problem solving. Students will develop and implement useful heuristics, and reflect on problem solving strategies.
Prerequisite: MATH 361.
Corequisite: None.
Registration Information: Liberal Studies General Education Mathematics requirement met.

MATH 411 Introduction to Topology 3(3-0)
As Needed.
An introduction to topological spaces, homeomorphisms, topological properties, and separation axioms.
Prerequisite: MATH 319 or MATH 320 or MATH 330.
Corequisite: None.
Registration Information: None.

MATH 421 Introduction to Analysis 4(4-0)
Spring.
An introductory course in real analysis providing a rigorous development of the concepts of elementary calculus.
Prerequisite: MATH 319 or MATH 320 or MATH 330 and MATH 325.
Corequisite: None.
Registration Information: None.

MATH 425 Complex Variables 3(3-0)
Fall, Even.
An introduction to complex function theory. Complex numbers, sequences and series, the calculus of complex functions, analytic functions, and conformal mappings.
Prerequisite: MATH 325.
Corequisite: None.
Registration Information: None.

MATH 427 Abstract Algebra 4(4-0)
Fall.
Introduction to groups, rings and fields and their elementary properties.
Prerequisite: MATH 307 and MATH 319 or MATH 320 or MATH 330.
Corequisite: None.
Registration Information: None.

MATH 442 Machine Learning for Data Analytics 3(2-2)
As Needed.
Implementation of algorithms for supervised and unsupervised learning, to include linear/logistic regression, random forests, naïve Bayes, neural networks, clustering, support vector machines, hidden markov models.
Prerequisite: MATH 242.
Corequisite: None.
Registration Information: None.

MATH 445 Discrete Mathematics 3(3-0)
As Needed.
Topics selected from mathematical reasoning, combinatorial techniques, set theory, binary relations, functions and sequences, algorithm analysis, and discrete analysis.
Prerequisite: MATH 224 and MATH 307.
Corequisite: None.
Registration Information: Knowledge of a programming language.

MATH 463 History of Mathematics 3(3-0)
Fall, Odd.
Survey of the origins of important mathematical concepts and of the mathematicians responsible for these discoveries.
Prerequisite: MATH 319 or MATH 320 or MATH 330.
Corequisite: None.
Registration Information: None.

MATH 477 Methods for Teaching Secondary Math 4(3-2)
Fall, Even.
Topics and issues in secondary mathematics education, including materials development, learning theories, instructional and assessment strategies, curriculum, planning and standards. Sixty hours field experience required.
Prerequisite: MATH 319 or MATH 320 or MATH 330.
Corequisite: None.
Registration Information: Acceptance into Teacher Education Program.

MATH 480 Tutoring Practicum (1-2 V)
As Needed.
Participation in tutoring mathematics in the MLC under the guidance of the MLC Director.
Prerequisite: MATH 224.
Corequisite: None.
Registration Information: Permission of Math Learning Center Director. Repeatable (2).

MATH 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MATH 492 Research (1-3 V)
As Needed.
Research project selected by student and supervised by a regular mathematics faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of department. Repeatable (99).

MATH 493 Seminar (1-3 V)
As Needed.
Seminar.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Permission of instructor. Repeatable (99).

MATH 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Permission of instructor. Repeatable (99).

MATH 498 Internship (1-6 V)
As Needed.
Work experience using the discipline of mathematics under the direction of the selected organization and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Permission of department chair. Repeatable (99).

MATH 501 Foundations of Mathematics 3(3-0)
As Needed.
Sets, logic, axiomatics, mappings and the various sub-systems of the reals for beginning graduate students.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MATH 507 Linear Algebra 3(3-0)
As Needed.
Vector spaces, linear transformations, matrix representation, canonical form.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MATH 521 Intermediate Analysis 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Permission of instructor.

MATH 527 Abstract Algebra 3(3-0)
As Needed.
Groups, rings, integral domains, quotient rings, ideals, fields, homomorphisms and related topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MATH 530 Advanced Geometry 3(3-0)
As Needed.
Foundations of geometry, geometric transformations, and applications.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MATH 550 Statistical Methods 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

MATH 556 (EN 556) Design & Analysis of Experiments 3(3-0)
Summer.
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 MATH 356.
Corequisite: None.
Registration Information: None.

MATH 577 Concepts in Secondary School Mathematics (1-4 V)
As Needed.
Problems of teaching secondary school mathematics; the slow learner, methods, gifted students, evaluation.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MATH 591 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

MATH 595 Independent Study (1-2 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

MATH 598 Graduate Internship (1-4 V)
As Needed.
Volunteer or paid work experience under the combined supervision of the selected organization and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

MATH 599 Thesis Research (1-6 V)
As Needed.
Thesis Research.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

Physics/Physical Science (PHYS)

PHYS 110 Astronomy (GT-SC2) 3(3-0)
Fall, Spring.
Solar system, including motions of the planets, eclipses, and satellite exploration; classification and evolution of stars; clusters, nebulae, galaxies and the expanding universe.
Prerequisite: MATH 096.
Corequisite: None.
Registration Information: Satisfactory placement score.
(Gen Ed: ST, GT-SC2)

PHYS 110L Astronomy Lab (GT-SC1) 1(0-2)
Fall, Spring.
Laboratory course to accompany PHYS 110.
Prerequisite: None.
Corequisite: None.
Registration Information: PHYS 110 strongly recommended as prerequisite.
(Gen Ed: ST, GT-SC1)

PHYS 140 Light, Energy, & the Atom (GT-SC2) 3(3-0)
As Needed.
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.
Prerequisite: MATH 096.
Corequisite: None.
Registration Information: Satisfactory placement score.
(Gen Ed: ST, GT-SC2)

PHYS 140L Light, Energy and the Atom Lab (GT-SC1) 1(0-2)
As Needed.
Optional laboratory to accompany PHYS 140. Experiments in light, solar energy, atomic and nuclear physics with emphasis on qualitative understanding of observations.
Prerequisite: None.
Corequisite: None.
Registration Information: PHYS 140 strongly recommended as co-requisite.
(Gen Ed: ST, GT-SC1)

PHYS 150 (CHEM 150) Elementary Concepts in Phys & Chem 4(3-2)
Spring.
Hands-on standards-based approach to understanding basic concepts of physics and chemistry. Integrated lecture, lab and discussion periods.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance into Teacher Education Program.

PHYS 201 Principles of Physics I (GT-SC2) 3(3-0)
Fall, Spring, Summer.
Motion, forces, conservation of energy and momentum, wave motion, sound and heat. For engineering, technology, life sciences, and other interested students.
Prerequisite: MATH 120.
Corequisite: None.
Registration Information: Satisfactory math placement exam score. PHYS 201L strongly recommended as co-requisite.
(Gen Ed: ST, GT-SC2)

PHYS 201L Principles of Physics Lab I (GT-SC1) 1(0-2)
Fall, Spring, Summer.
Principles of Physics Lab I.
Prerequisite: None.
Corequisite: None.
Registration Information: PHYS 201 strongly recommended as corequisite.
(Gen Ed: ST, GT-SC1)

PHYS 202 Principles Of Physics II (GT-SC2) 3(3-0)
Fall, Spring.
Electrostatics, electromagnetism, light, atomic and nuclear physics.
Prerequisite: None.
Corequisite: None.
Registration Information: PHYS 201L strongly recommended as corequisite.
(Gen Ed: ST, GT-SC2)

PHYS 202L Principles Of Physics II Lab (GT-SC1) 1(0-2)
Fall, Spring.
Principles Of Physics II Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: PHYS 202 strongly recommended as corequisite.
(Gen Ed: ST, GT-SC1)

PHYS 221 General Physics I 4(4-0)
Spring.
Newtonian mechanics, including linear and rotational dynamics, momentum, energy, gravitation, fluid mechanics, wave motion and thermodynamics. Uses the calculus and vector notation.
Prerequisite: MATH 126.
Corequisite: None.
Registration Information: PHYS 221L strongly recommended as corequisite.
(Gen Ed: ST, GT-SC2)

PHYS 221L General Physics I Lab (GT-SC1) 1(0-2)
Spring.
This course is the laboratory component of PHYS 221.
Prerequisite: None.
Corequisite: None.
Registration Information: PHYS 221 strongly recommended as corequisite.
(Gen Ed: ST, GT-SC1)

PHYS 222 General Physics II 4(4-0)
Fall.
Electrostatics, electromagnetism, elementary circuits, electrical oscillations, geometrical optics and the wave aspects of light.
Prerequisite: PHYS 221.
Corequisite: None.
Registration Information: PHYS 222L strongly recommended as corequisite.
(Gen Ed: ST, GT-SC2)

PHYS 222L General Physics II Lab (GT-SC1) 1(0-2)
Fall, Spring.
General Physics II Lab.
Prerequisite: None.
Corequisite: PHYS 222.
Registration Information: None.
(Gen Ed: ST, GT-SC1)

PHYS 291 Special Topics (1-4 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

PHYS 293 Seminar 1(1-0)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

PHYS 301 Analytical & Orbital Mechanics 4(4-0)
Fall, Even.
Statics & dynamics of particles & rigid bodies. Conservation principles, minimum principles, accelerated coordinate systems, Lagrangian & Hamiltonian methods. Applications to astrodynamics & oscillations applications.
Prerequisite: MATH 325 and MATH 337 and PHYS 221.
Corequisite: None.
Registration Information: None.

PHYS 321 Thermodynamics 3(3-0)
Spring, Odd.
Introduction to thermodynamic laws and principles, entropy, kinetic theory and statistical mechanics.
Prerequisite: PHYS 221.
Corequisite: None.
Registration Information: None.

PHYS 322 Advanced Laboratory - Thermo 1(0-2)
Fall, Even.
Teaches how and why experimental physics is done through experiments related to thermodynamics and energy; good record keeping, data analysis, modeling and reporting of results.
Prerequisite: MATH 242 and PHYS 321.
Corequisite: None.
Registration Information: Repeatable (2).

PHYS 323 General Physics III 4(4-0)
Fall, Even.
Introduction to special relativity, kinetic theory, quantization, wave mechanics, atomic structure, nuclear physics and spectroscopy.
Prerequisite: MATH 224 and PHYS 222 and PHYS 222L.
Corequisite: None.
Registration Information: PHYS 323 Lab strongly recommended.

PHYS 323L General Physics III Lab 1(0-2)
Spring.
Teaches how and why experimental physics is done through representive experiments related to PHYS 323 topics; techniques of good record keeping, data analysis, modeling, instrumentation and presentation of results.
Prerequisite: MATH 242.
Corequisite: None.
Registration Information: PHYS 323 strongly recommended as corequisite.

PHYS 341 Optics 3(3-0)
Fall, Odd.
Geometrical optics, interference, diffraction, polarization of light, optical properties of materials, optical sources including lasers, and holography.
Prerequisite: MATH 325 and PHYS 222 and PHYS 222L.
Corequisite: None.
Registration Information: None.

PHYS 342 Advanced Laboratory-Optics 1(0-2)
Fall, Odd.
Develops skills, experience and independence in experimental research design, modeling, data analysis, instrumentation and presentation of results through experiments related to PHYS 341.
Prerequisite: MATH 242 and PHYS 341.
Corequisite: None.
Registration Information: Repeatable (2).

PHYS 431 Electricity & Magnetism 4(4-0)
Spring, Even.
Mathematical treatment of electrostatics, currents, magnetism, electromagnetic induction, Maxwell's equations and electrodynamics.
Prerequisite: MATH 325 and MATH 337 and PHYS 222 and PHYS 222L.
Corequisite: None.
Registration Information: None.

PHYS 432 Advanced Laboratory-Electricity and Magnetism 1(0-2)
Spring, Even.
Develops skills, experience and independence in experimental research design, modeling, data analysis, instrumentation and presentation of results through representative experiments related to PHYS 431.
Prerequisite: MATH 242 and PHYS 431.
Corequisite: None.
Registration Information: Repeatable (2).

PHYS 441 Quantum Mechanics 4(4-0)
Spring, Odd.
Wave packets, operators, the Schroedinger equation, eigenstates, angular momentum, spin, magnetic moments, Heisenberg formulation.
Prerequisite: MATH 325 and MATH 337 and PHYS 323 and PHYS 323L.
Corequisite: None.
Registration Information: None.

PHYS 480 Practicum in Laboratory Instruction 1(0-2)
As Needed.
Participation in laboratory instruction under the guidance of a staff member. Includes instruction on laboratory safety.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (2).

PHYS 491 Special Topics (1-4 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

PHYS 492 Research 1(0-2)
As Needed.
Research.
Prerequisite: None.
Corequisite: None.
Registration Information: Eight credits in upper-division PHYS courses. Repeatable (99).

PHYS 493 Seminar 1(1-0)
As Needed.
Class members report on recently published work or on their own research in physics or applied physics.
Prerequisite: None.
Corequisite: None.
Registration Information: Advanced standing with a major or minor in physics. Repeatable (2).

PHYS 495 Independent Study (1-2 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Permission of department chair. Repeatable (99).

PHYS 498 Internship (1-6 V)
As Needed.
Work experience using the discipline of physics under the direction of the selected organization and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Permission of department chair. Repeatable (99).

PHYS 499 Thesis Research 1(1-0)
As Needed.
Students write a research paper describing their own research.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Repeatable (99).

Computational Mathematics, Minor

Specific Program Requirements

Course	Title	Credits
Required Courses		
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 207	Matrix and Vector Algebra with Applications	3
MATH 224	Calculus and Analytic Geometry II	5
MATH 307	Introduction to Linear Algebra	3-4
or MATH 342	Introduction to Numerical Analysis	
MATH 320	Introductory Discrete Mathematics	3
MATH 345	Algorithms & Data Structures	4
Total Credits		**23-24**

Requirements for the Computational Mathematics Minor Specific to Math Majors

Math majors, in lieu of the first 13 hours above are required to take:

Course	Title	Credits
Select an approved programming elective		3
CIS 171	Introduction to Java Programming	4
MATH 242	Introduction to Computation	4
Total Credits		**11**

Data Analytics, Certficate

This certificate is for degree-seeking students as well as individuals working in data-intensive sectors who need to better understand quantitative data analytics, including how to implement powerful machine-learning techniques. Students earning this certificate will acquire a deeper, more sophisticated understanding of and the ability to implement powerful current tools and techniques for data analysis.

Upon completion of the data analytics certificate program, students will demonstrate

- facility with important data-friendly programming languages such as Python
- knowledge of significant algorithms that relate to data analytics, including how to analyze algorithms for effectiveness; and
- knowledge and ability to implement a variety of modern data analytics techniques and tools, including from machine learning.

As the certificate courses are electives within the mathematics major, additional learning outcomes will include the following:

- Students will be able to formulate and solve problems using mathematical tools, while working alone or in groups on non-routine and open-ended problems involving applications to other fields, and problems involving real-world data.
- Students will demonstrate the ability to learn independently, locate and use appropriate sources of technical material, and make use of modern computational tools.
- Students will produce convincing, precise verbal and written communications of technical material.

Specific Program Requirements

Course	Title	Credits
MATH 242	Introduction to Computation	4
MATH 345	Algorithms & Data Structures	4
MATH 442	Machine Learning for Data Analytics	3
Elective [1]		2
Total Credits		**13**

[1] Contact the department chair for possible options (e.g. a special topics offered by the Department of Mathematics and Physics such as R-based analytics or quantum computing, or a bioinformatics class taught within the Department of Biology, or possibly some offerings from the Department of Computer Information Systems would be approved).

Math/Physics Double Major, Bachelor of Science

Specific Program Requirements

Course	Title	Credits
MATH Courses		
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
MATH 307	Introduction to Linear Algebra	4
MATH 325	Intermediate Calculus	4
MATH 337	Differential Equations I	3
MATH 338	Differential Equations II	3
Select one of the following:		3-6
MATH 350 & MATH 356	Probability and Statistics for Engineers & Scientists	6
MATH 550	Statistical Methods	3
MATH 421	Introduction to Analysis	4
MATH 427	Abstract Algebra	4
PHYS Courses		
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
PHYS 301	Analytical & Orbital Mechanics	4
PHYS 323 & 323L	General Physics III and General Physics III Lab	5

PHYS 321 & PHYS 322	Thermodynamics and Advanced Laboratory - Thermo	4
PHYS 431 & PHYS 432	Electricity & Magnetism and Advanced Laboratory-Electricity and Magnetism	5
PHYS 441	Quantum Mechanics	4
PHYS 480	Practicum in Laboratory Instruction	1
PHYS 493	Seminar	1
Other Requirements		
Select one of the following:		3-4
MATH 425	Complex Variables	3
PHYS 341 & PHYS 342	Optics and Advanced Laboratory-Optics	4
PHYS 492	Research	1
or MATH 492	Research	
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
Select 3 credits in Computer Programming		3
General Education		
Select 24 credits		24
Electives		
Select 5-6 credits		5-6
Total Credits		**115-120**

Mathematics, Bachelor of Arts

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.

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.

Specific Program Requirements

- All mathematics majors must complete the mathematics core curriculum: MATH 126 Calculus & Analytic Geometry I (GT-MA1) (5 c.h.), MATH 224 Calculus and Analytic Geometry II (5 c.h.), MATH 307 Introduction to Linear Algebra (4 c.h.), MATH 325 Intermediate Calculus (4 c.h.), MATH 350 Probability (3 c.h.), MATH 421 Introduction to Analysis (4 c.h.), and MATH 427 Abstract Algebra (4 c.h.). Majors are expected to complete core courses numbered above MATH 325 Intermediate Calculus (4 c.h.) 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 Differential Equations I (3 c.h.) is a required elective for all mathematics majors not pursuing secondary education endorsement.
- All majors are required to complete an approved two-term sequence in a laboratory science (CHEM 121 General Chemistry I (GT-SC2) (4 c.h.)/CHEM 121L General Chemistry Lab I (GT-SC1) (1 c.h.) and CHEM 122 General Chemistry II (GT-SC2) (4 c.h.)/CHEM 122L General Chemistry Lab II (GT-SC1) (1 c.h.), or PHYS 221 General Physics I (4 c.h.)/PHYS 221L General Physics I Lab (GT-SC1) (1 c.h.) and PHYS 222 General Physics II (4 c.h.)/PHYS 222L General Physics II Lab (GT-SC1) (1 c.h.)).
- 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.
- Students seeking the Bachelor of Arts should consult the catalog for the options to complete the foreign language requirement.

Course	Title	Credits
MATH Courses		
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
MATH 307	Introduction to Linear Algebra	4
MATH 325	Intermediate Calculus	4
MATH 337	Differential Equations I	3
MATH 350	Probability	3
MATH 356	Statistics for Engineers & Scientists	3
MATH 421	Introduction to Analysis	4
MATH 427	Abstract Algebra	4
Electives		
Select 9 credits in Upper-division MATH Electives [1]		9

Other Requirements	
Select 10 credits in a Laboratory Science Sequence	10
Select 4 credits in Computer Programming	4
General Education	
General Education credits	24
Electives	
Select 38 credits	38
Total Credits	**120**

[1] Excluding MATH 360 Elementary Mathematics Concepts I (3 c.h.), MATH 361 Elementary Mathematics Concepts II (3 c.h.), MATH 477 Methods for Teaching Secondary Math (4 c.h.).

Mathematics, Bachelor of Science

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.

Outcomes Assessment Activities

- Faculty advisers 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. Advisers 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.

Specific Program Requirements

- All mathematics majors must complete the mathematics core curriculum: MATH 126 Calculus & Analytic Geometry I (GT-MA1) (5 c.h.), MATH 224 Calculus and Analytic Geometry II (5 c.h.), MATH 307 Introduction to Linear Algebra (4 c.h.), MATH 325 Intermediate Calculus (4 c.h.), MATH 350 Probability (3 c.h.), MATH 421 Introduction to Analysis (4 c.h.), and MATH 427 Abstract Algebra (4 c.h.). Majors are expected to complete core courses numbered above MATH 325 Intermediate Calculus (4 c.h.) 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 Differential Equations I (3 c.h.) is a required elective for all mathematics majors not pursuing secondary education endorsement.
- All majors are required to complete an approved two-term sequence in a laboratory science (CHEM 121 General Chemistry I (GT-SC2) (4 c.h.)/CHEM 121L General Chemistry Lab I (GT-SC1) (1 c.h.) and CHEM 122 General Chemistry II (GT-SC2) (4 c.h.)/CHEM 122L General Chemistry Lab II (GT-SC1) (1 c.h.), or PHYS 221 General Physics I (4 c.h.)/PHYS 221L General Physics I Lab (GT-SC1) (1 c.h.) and PHYS 222 General Physics II (4 c.h.)/PHYS 222L General Physics II Lab (GT-SC1) (1 c.h.)).
- 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.

Course	Title	Credits
MATH Courses		
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
MATH 307	Introduction to Linear Algebra	4
MATH 325	Intermediate Calculus	4
MATH 337	Differential Equations I	3
MATH 350	Probability	3
MATH 356	Statistics for Engineers & Scientists	3
MATH 421	Introduction to Analysis	4
MATH 427	Abstract Algebra	4
Electives		
Select 9 credits in Upper-division MATH Electives [1]		9
Other Requirements		
Select 10 credits in a Laboratory Science Sequence		10
Select 4 credits in Computer Programming		4
General Education		
General Education credits		24
Electives		
Select 38 credits		38
Total Credits		**120**

[1] Excluding MATH 360 Elementary Mathematics Concepts I (3 c.h.), MATH 361 Elementary Mathematics Concepts II (3 c.h.), MATH 477 Methods for Teaching Secondary Math (4 c.h.).

Mathematics, Minor

Specific Program Requirements

Course	Title	Credits
Required Courses		**10**
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
Electives		**9**
Select at least 9 credits of upper-division mathematics courses [1,2]		
Total Credits		**19**

1 Two of these must be taken at CSU Pueblo.

2 Excluding MATH 360 Elementary Mathematics Concepts I (3 c.h.), MATH 361 Elementary Mathematics Concepts II (3 c.h.), MATH 362 Problem Solving for K-6 Teachers (3 c.h.) & MATH 477 Methods for Teaching Secondary Math (4 c.h.).

Mathematics: 7-12 Teacher Preparation Concentration, Bachelor of Arts

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.

Outcomes Assessment Activities

- Faculty advisers 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. Advisers 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.

Specific Program Requirements

- All mathematics majors must complete the mathematics core curriculum: MATH 126 Calculus & Analytic Geometry I (GT-MA1) (5 c.h.), MATH 224 Calculus and Analytic Geometry II (5 c.h.), MATH 307 Introduction to Linear Algebra (4 c.h.), MATH 325 Intermediate Calculus (4 c.h.), MATH 350 Probability (3 c.h.), MATH 421 Introduction to Analysis (4 c.h.), and MATH 427 Abstract Algebra (4 c.h.). Majors are expected to complete core courses numbered above MATH 325 Intermediate Calculus (4 c.h.) 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 Differential Equations I (3 c.h.) is a required elective for all mathematics majors not pursuing secondary education concentration.
- All majors are required to complete an approved two-term sequence in a laboratory science (CHEM 121 General Chemistry I (GT-SC2) (4 c.h.)/CHEM 121L General Chemistry Lab I (GT-SC1) (1 c.h.) and CHEM 122 General Chemistry II (GT-SC2) (4 c.h.)/CHEM 122L General Chemistry Lab II (GT-SC1) (1 c.h.), or PHYS 221 General Physics I (4 c.h.)/PHYS 221L General Physics I Lab (GT-SC1) (1 c.h.) and PHYS 222 General Physics II (4 c.h.)/PHYS 222L General Physics II Lab (GT-SC1) (1 c.h.)).
- 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.

Course	Title	Credits
MATH Courses		
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
MATH 307	Introduction to Linear Algebra	4
MATH 319	Number Theory	3
MATH 325	Intermediate Calculus	4
MATH 330	Introduction to Higher Geometry	3
MATH 350	Probability	3
MATH 356	Statistics for Engineers & Scientists	3
MATH 421	Introduction to Analysis	4
MATH 427	Abstract Algebra	4
MATH 463	History of Mathematics	3
MATH 477	Methods for Teaching Secondary Math	4
Education Minor		**33**
Laboratory Science Sequence		**10**
Computer Programming		**4**
Electives		**7**

General Education	**21**
Total Credits	**120**

[1] Excluding MATH 360 Elementary Mathematics Concepts I (3 c.h.), MATH 361 Elementary Mathematics Concepts II (3 c.h.), MATH 477 Methods for Teaching Secondary Math (4 c.h.).

Specific Requirements for the Secondary and K-12 Teaching Endorsements/Minor

The student must complete an appropriate major and the following Education courses:

Course	Title	Credits
Select one of the following:		3
PSYC 151	Human Development (GT-SS3)	3
PSYC 251	Childhood and Adolescence	3
PSYC 342	Educational Psychology	3
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology [2]	3
ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
RDG 435	Disciplinary Literacy [3, 5]	4
Special Methods in Endorsement Areas (Prerequisites - Admission to Education) [5]		4
ED 412	Teaching Diverse Learners [4, 5]	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
or ED 489	Student Teaching K-12	
Total Credits [3]		37-40

[1] Music students may take PSYC 151 Human Development (GT-SS3) (3 c.h.)or PSYC 251 Childhood and Adolescence (3 c.h.).

[2] Music Education students may complete MUS 103 Music and Computer Technology I (1 c.h.) and MUS 306 Technology for Music Educators (2 c.h.) for ED 280 Educational Media and Technology (3 c.h.).

[3] English/Language Arts student must also complete RDG 410 Teaching Reading (3 c.h.)

[4] Physical Education students may complete EPER 465 Adapted Physical Education (3 c.h.) or ED 412 Teaching Diverse Learners (3 c.h.).

[5] GPA of 2.6 required

Mathematics: 7-12 Teacher Preparation Concentration, Bachelor of Science

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.

Outcomes Assessment Activities

- Faculty advisers 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. Advisers 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.

Specific Program Requirements

- All mathematics majors must complete the mathematics core curriculum: MATH 126 Calculus & Analytic Geometry I (GT-MA1) (5 c.h.), MATH 224 Calculus and Analytic Geometry II (5 c.h.), MATH 307 Introduction to Linear Algebra (4 c.h.), MATH 325 Intermediate Calculus (4 c.h.), MATH 350 Probability (3 c.h.), MATH 421 Introduction to Analysis (4 c.h.), and MATH 427 Abstract Algebra (4 c.h.). Majors are expected to complete core courses numbered above MATH 325 Intermediate Calculus (4 c.h.) 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 Differential Equations I (3 c.h.) is a required elective for all mathematics majors not pursuing secondary education concentration.
- All majors are required to complete an approved two-term sequence in a laboratory science (CHEM 121 General Chemistry I (GT-SC2) (4 c.h.)/CHEM 121L General Chemistry Lab I (GT-SC1) (1 c.h.) and CHEM 122 General Chemistry II (GT-SC2) (4 c.h.)/CHEM 122L General Chemistry Lab II (GT-SC1) (1 c.h.), or PHYS 221 General Physics I (4 c.h.)/PHYS 221L General Physics I Lab (GT-SC1) (1 c.h.) and PHYS 222 General Physics II (4 c.h.)/PHYS 222L General Physics II Lab (GT-SC1) (1 c.h.)).

- 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.

Course	Title	Credits
MATH Courses		
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
MATH 307	Introduction to Linear Algebra	4
MATH 319	Number Theory	3
MATH 325	Intermediate Calculus	4
MATH 330	Introduction to Higher Geometry	3
MATH 350	Probability	3
MATH 356	Statistics for Engineers & Scientists	3
MATH 421	Introduction to Analysis	4
MATH 427	Abstract Algebra	4
MATH 463	History of Mathematics	3
MATH 477	Methods for Teaching Secondary Math	4
Education Minor		**33**
Laboratory Science Sequence		**10**
Computer Programming		**4**
Electives		**7**
General Education		**21**
Total Credits		**120**

[1] Excluding MATH 360 Elementary Mathematics Concepts I (3 c.h.), MATH 361 Elementary Mathematics Concepts II (3 c.h.), MATH 477 Methods for Teaching Secondary Math (4 c.h.).

Specific Requirements for the Secondary and K-12 Teaching Endorsements/Minor

The student must complete an appropriate major and the following Education courses:

Course	Title	Credits
Select one of the following:		3
PSYC 151	Human Development (GT-SS3)	3
PSYC 251	Childhood and Adolescence	3
PSYC 342	Educational Psychology	3
ED 202	Foundations of Education	3
ED 280	Educational Media and Technology [2]	3
ED 301	Frameworks of Teaching (Admission to Education is completed in this course)	4
RDG 435	Disciplinary Literacy [3, 5]	4
Special Methods in Endorsement Areas (Prerequisites - Admission to Education) [5]		4
ED 412	Teaching Diverse Learners [4, 5]	3
ED 485	Capstone Seminar in Education	1
ED 488	Student Teaching Secondary	12
or ED 489	Student Teaching K-12	
Total Credits [3]		37-40

[1] Music students may take PSYC 151 Human Development (GT-SS3) (3 c.h.)or PSYC 251 Childhood and Adolescence (3 c.h.).

[2] Music Education students may complete MUS 103 Music and Computer Technology I (1 c.h.) and MUS 306 Technology for Music Educators (2 c.h.) for ED 280 Educational Media and Technology (3 c.h.).

[3] English/Language Arts student must also complete RDG 410 Teaching Reading (3 c.h.)

[4] Physical Education students may complete EPER 465 Adapted Physical Education (3 c.h.) or ED 412 Teaching Diverse Learners (3 c.h.).

[5] GPA of 2.6 required

Physics, Bachelor of 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.

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.

Specific Program Requirements

- Students graduating with a BS in physics must complete physics courses in their program with grades of C or better.
- 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.

- Physics majors are expected to complete at CSU Pueblo all physics courses in their program numbered above PHYS 323. Minors are expected to complete at least 7 credit hours of upper division physics courses at CSU Pueblo.
- 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 concentration areas, students must demonstrate knowledge of computer programming.
- In all but the teaching concentration 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.

Course	Title	Credits
PHYS Courses		
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
PHYS 301	Analytical & Orbital Mechanics	4
PHYS 321	Thermodynamics	3
PHYS 322	Advanced Laboratory - Thermo	1
PHYS 323 & 323L	General Physics III and General Physics III Lab	5
PHYS 341	Optics	3
PHYS 342	Advanced Laboratory-Optics	1
PHYS 431	Electricity & Magnetism	4
PHYS 432	Advanced Laboratory-Electricity and Magnetism	1
PHYS 441	Quantum Mechanics	4
PHYS 480	Practicum in Laboratory Instruction	1
PHYS 492	Research	1
PHYS 493	Seminar	1
PHYS 499	Thesis Research	1
Other Required Courses		
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
MATH 242	Introduction to Computation (The higher level and Python language of Math 242 is needed to increase the computational skill of majors and graduates.)	4
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 207	Matrix and Vector Algebra with Applications	3
MATH 224	Calculus and Analytic Geometry II	5
MATH 325	Intermediate Calculus	4
MATH 337	Differential Equations I	3
MATH 338	Differential Equations II	3
Approved Math Elective		
Select 3-4 credits		3-4
General Education		
Select 24 credits		24
Electives		
Select 16-17 credits		16-17
Total Credits		**120-122**

Physics, Minor

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.

Specific Program Requirements

Course	Title	Credits
PHYS Courses		
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
PHYS 323 & 323L	General Physics III and General Physics III Lab	5
Approved Upper-division Electives in Physics		
Select 5 credits		5
Total Credits		**20**

Physics: 7-12 Physical Science Teacher Preparation Concentration, Bachelor of 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.

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 concentration 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 concentration 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.

Specific Program 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 concentration areas, students must demonstrate knowledge of computer programming.
- In all but the teaching concentration 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.

Course	Title	Credits
PHYS Courses		
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
PHYS 301	Analytical & Orbital Mechanics	4
PHYS 321	Thermodynamics	3
PHYS 322	Advanced Laboratory - Thermo	1
PHYS 323 & 323L	General Physics III and General Physics III Lab	5
PHYS 341	Optics	3
PHYS 342	Advanced Laboratory-Optics	1
PHYS 431	Electricity & Magnetism	4
PHYS 432	Advanced Laboratory-Electricity and Magnetism	1
PHYS 441	Quantum Mechanics	4
PHYS 480	Practicum in Laboratory Instruction	1
PHYS 492	Research	1
PHYS 493	Seminar	1
PHYS 499	Thesis Research	1
Other Required Courses		
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
MATH 242 or EN 103	Introduction to Computation Problem Solving for Engineers	3-4
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 207	Matrix and Vector Algebra with Applications	3
MATH 224	Calculus and Analytic Geometry II	5
MATH 325	Intermediate Calculus	4
MATH 337	Differential Equations I	3
MATH 338	Differential Equations II	3
Approved Math Elective		
Select 3-4 credits		3-4
General Education		
Select 24 credits		24
Electives		
Select 15-17 credits		15-17
Total Credits		**118-122**

Specific Concentration Requirements

Course	Title	Credits
PHYS Courses		
PHYS 110 & 110L	Astronomy (GT-SC2) and Astronomy Lab (GT-SC1)	4
PHYS 140 & 140L	Light, Energy, & the Atom (GT-SC2) and Light, Energy and the Atom Lab (GT-SC1)	4
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
PHYS 323 & 323L	General Physics III and General Physics III Lab	5
CHEM Courses		
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
Select one of the following:		4-5
CHEM 211 & 211L	Introduction to Organic Chemistry and Intro to Organic Chemistry Lab	4
CHEM 301 & 301L	Organic Chemistry I and Organic Chemistry Lab I	5
CHEM 317 & 317L	Quantitative Analysis and Quantitative Analysis Lab	5
CHEM 321	Physical Chemistry I	3
CHEM 378	Practicum in Laboratory Instruction	1
Other Required Courses		
BIOL 100 & 100L	Principles of Biology (GT-SC2) and Principles of Biology Lab (GT-SC1)	4

BIOL 121 & 121L	Environmental Conservation (GT-SC2) and Environmental Conservation Lab (GT-SC1)	4
GEOL 101 & 101L	Earth Science (GT-SC2) and Earth Science Lab (GT-SC1)	4
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
ED 444	Teaching Secondary Science	4
General Education		
Select 21 credits		21
Education Minor Courses		**33**
Total Credits		**126-127**

Physics: 7-12 Teacher Preparation Concentration, Bachelor of 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.

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.

Specific Program 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 concentration areas, students must demonstrate knowledge of computer programming.
- In all but the teaching concentration 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.

Course	Title	Credits
PHYS Courses		
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
PHYS 301	Analytical & Orbital Mechanics	4
PHYS 321	Thermodynamics	3
PHYS 322	Advanced Laboratory - Thermo	1
PHYS 323 & 323L	General Physics III and General Physics III Lab	5
PHYS 341	Optics	3
PHYS 342	Advanced Laboratory-Optics	1
PHYS 431	Electricity & Magnetism	4
PHYS 432	Advanced Laboratory-Electricity and Magnetism	1
PHYS 441	Quantum Mechanics	4
PHYS 480	Practicum in Laboratory Instruction	1
PHYS 492	Research	1
PHYS 493	Seminar	1
PHYS 499	Thesis Research	1
Other Required Courses		
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
MATH 242 or EN 103	Introduction to Computation Problem Solving for Engineers	3-4
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 207	Matrix and Vector Algebra with Applications	3
MATH 224	Calculus and Analytic Geometry II	5
MATH 325	Intermediate Calculus	4
MATH 337	Differential Equations I	3
MATH 338	Differential Equations II	3

Approved Math Elective	
Select 3-4 credits	3-4
General Education	
Select 24 credits	24
Electives	
Select 15-17 credits	15-17
Total Credits	**118-122**

Specific Concentration Requirements

Course	Title	Credits
PHYS Courses		
PHYS 110	Astronomy (GT-SC2)	3
PHYS 140 & 140L	Light, Energy, & the Atom (GT-SC2) and Light, Energy and the Atom Lab (GT-SC1)	4
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
PHYS 321 & PHYS 322	Thermodynamics and Advanced Laboratory - Thermo	4
PHYS 323 & 323L	General Physics III and General Physics III Lab	5
PHYS 341 & PHYS 342	Optics and Advanced Laboratory-Optics	4
PHYS 480	Practicum in Laboratory Instruction	1
Other Required Courses		
BIOL 100 & 100L	Principles of Biology (GT-SC2) and Principles of Biology Lab (GT-SC1)	4
BIOL 121 & 121L	Environmental Conservation (GT-SC2) and Environmental Conservation Lab (GT-SC1)	4
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
ED 444	Teaching Secondary Science	4
GEOL 101 & 101L	Earth Science (GT-SC2) and Earth Science Lab (GT-SC1)	4
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
General Education		
Education Minor Requirements		**33**
Select 21 credits		21
Total Credits		**121**

School of Engineering

The School of Engineering at Colorado State University Pueblo includes five undergraduate programs (1) civil engineering (BSCE), (2) civil engineering technology (BSCET), (3) construction management (BS), (4) engineering (BSE) with a mechatronics specialization, and (5) industrial engineering (BSIE). The school also offers two graduate programs in engineering at the master's level, five minors and several certificate programs. Undergraduate students who qualify may opt to enroll in one of the 3+2 programs and be able to simultaneously graduate with a BS and an MS in five years.

Civil Engineering: This undergraduate civil engineering program leads to the Bachelor of Science in Civil Engineering (BSCE) degree. The degree program prepares graduates for entry level positions in activities associated with the analysis, planning, design, construction, and maintenance of infrastructure systems including buildings, highways, airports, bridges, water supply, flood mitigation systems. Civil engineers are concerned with the impacts that projects have to the public and the environment. This baccalaureate program will expose students to the civil engineering subdisciplines of structural engineering, transportation engineering, hydraulic and hydrologic engineering, construction engineering, and geotechnical engineering.

Civil Engineering Technology: The undergraduate engineering technology program leads to a Bachelor of Science in Civil Engineering Technology (BSCET) degree. The BSCET degree program prepares graduates for entry level positions to support civil engineering activities associated with the design, construction, operation and maintenance of structures, highways, water supply and disposal systems, and surface water drainage. This program is accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org (http://www.abet.org/), under the General Criteria and the Civil Engineering Technology and Similarly Named Programs Program Criteria.

Construction Management: The major in Construction Management (CM) leads to the Bachelor of Science (BS) degree in Construction Management. Graduates of the Construction Management 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.

Engineering (Mechatronics): The BSE is a 4-year program that can be completed at CSU Pueblo. The program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org, under the General Criteria. 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.

Industrial Engineering (BSIE): The BSIE is a 4-year program that can be completed at CSU Pueblo. The program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org (http://www.abet.org/), under the General Criteria and the Industrial Engineering and Similarly Named Programs Program Criteria. 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 and BSIE degrees simultaneously by taking 30 additional credit hours over one degree alone, including a second

senior design project. Please see the *Graduate Studies* section of this catalog for information about the MS degree programs in Industrial and Systems Engineering and in Mechatronics Engineering.

In our Pre-Engineering program, students seeking to major in some area of engineering other than industrial engineering, engineering with a mechatronics specialization or civil engineering (for example, electrical or mechanical engineering) can complete at least 60 credits that will transfer to other engineering schools. In the same spirit, the School of Engineering welcomes transfer students and has observed that transfer students are very successful when when they join our programs.

Three engineering minors are available with the following restrictions. The BSE minor is not available to BSIE majors, and the BSIE minor is not available to BSE majors. However, the BSCE minor is available to the BSE and BSIE majors.

Engineering (MS) and Industrial & Systems Engineering (MS)

The School of Engineering offers two distinct MS degrees: the MS in Mechatronics Engineering (MSME) and the MS in Industrial and Systems Engineering (MSISE).

The MSME program provides advanced education in mechatronics. 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. Railroad engineering combines civil, mechanical, electrical, and industrial engineering in solving engineering problems for the railroad industry.

Industrial and systems engineering deals with the design and analysis of complex, human/machine systems. Industrial and systems engineers use a “big picture” or systems-oriented viewpoint to serve as management and operations analysts, focusing on the people, materials, equipment and procedures needed for the most efficient and effective systems performance. Industrial and systems engineers analyze and evaluate systems against specified performance criteria, including efficiency, quality and safety, before new systems are created or old ones are modified. Industrial and systems engineering techniques can be applied in manufacturing and service industries, health care systems, governmental agencies and non-profit organizations.

Regular admission to the MSME or MSISE program requires an undergraduate GPA of at least 3.0 on a 4-point scale and completion of the GRE test.

Additional Program of Study Requirements for the MSME & MSISE Programs

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

- At least 21 credit hours must be in graduate level engineering courses.
- No more than 9 credit hours of graduate coursework may be accepted as transfer credit from another institution.
- Any course taken as a prerequisite to engineering graduate study at CSU Pueblo may not be counted towards graduation and must be taken for credit (i.e., not audited).

Advising

Each term, a student must meet with his or her advisor and be advised before the student can register for classes. Students are generally advised by the MSE/MSISE Program Director, unless the student is working on a thesis. Students working on a thesis are typically advised by their thesis advisors. A candidate for the MSME or MSISE degree must work with the advisor to design a program of study. The program of study must be approved by the advisor and department. This process is formalized by submitting a graduation planning sheet to the MSME/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 MSME program or MSISE program requires prior admission to graduate study at CSU Pueblo. Regulations governing graduate studies are contained in the *Graduate Policies and Procedures Guide* available from the Office of Admissions.

Prerequisite Requirements for Admission

Prior to being admitted to regular status, a student is required to demonstrate preparation for graduate study in the chosen concentration (for the MSME) or in industrial and systems engineering (for the MSISE). 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 MSME/MSISE Program Director.

Graduate Assistantships

Full-time student admitted to the program with regular status are eligible to apply for merit-based, competitive graduate assistantships. Graduate assistants receive financial support from the department in the form of a stipend and/or remission of tuition and fees for one year (two semesters). A graduate assistant who is supported at a funding level equivalent to full-time tuition and fees is required to choose the Thesis Option.

An assistantship is renewable for a second academic year provided the student remains in good academic standing and makes satisfactory progress towards completion of the MSME or MSISE. An award made to a student who does not perform adequately in his or her duties may be rescinded after the first semester of the award period. In extreme circumstances, an award may be rescinded before the end of a semester.

An application for assistantship consists of a résumé and letter of interest addressed to the department chair. For the following academic year, the deadline for application for an assistantship beginning in the Fall semester is April 1. Subject to availability of funds, assistantships may be granted to begin in the Spring semester.

Academic Programs

Undergraduate Programs

- Civil Engineering, Bachelor of Science in Civil Engineering (p. 478)
- Engineering, Bachelor of Science in Engineering: Mechatronics Specialization (p. 480)
- Industrial Engineering, Bachelor of Science in Industrial Engineering (p. 483)
- Pre-Engineering Program (p. 486)

Minors

- Civil Engineering, Minor (p. 448)
- Engineering, Minor (p. 481)
- Industrial Engineering, Minor (p. 484)
- Sustainability, Minor (p. 487)

3+2 Programs

- Engineering 3+2 Program, Bachelor of Science/Master of Science (p. 479)

Graduate Programs

- Industrial & Systems Engineering, Master of Science (p. 482)
- Mechatronics Engineering, Master of Science (p. 485)

Certificates

- Graduate Certificate in Railroad Engineering, Post-Baccalaureate Certificate (p. 481)
- Lean Green Belt, Certificate (p. 485)
- Six Sigma Green Belt, Certificate (p. 486)
- Sustainability, Certificate (p. 487)

Civil Engineering (CE)

CE 101 Introduction to Civil Engineering 2(2-0)
Fall.
Study of civil engineering opportunities, civil engineering design process, professional ethics, professional licensure, trigonometry, basic computer office applications and team works.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

CE 233 Strength of Materials with Lab 3(2-2)
Spring.
A study of the responses of materials to loads with attention to stresses, strains, elastic and plastic responses to beams and columns using analytical methods and calculus. Laboratory testing demonstrate these principles.
Prerequisites: EN 211.
Corequisites: None.
Registration Information: None.

CE 291 Special Topics 1-5(1-5-1-5)
As Needed.
Selected topics in civil engineering.
Prerequisites: None.
Corequisites: None.
Registration Information: Junior status or permission of instructor.

CE 321 Geotechnical Engineering I 3(2-2)
Spring.
Geotechnical engineering fundamentals, in-depth analysis and standard testing related to soil mechanics including permeability, consolidation and OSHA excavation safety.
Prerequisites: CE 233.
Corequisites: None.
Registration Information: None.

CE 331 Structural Analysis 3(3-0)
Fall.
Load calculations including wind and earthquake, and analysis of statically determinate and indeterminate structures including influence lines, approximate analysis, force method and moment distribution.
Prerequisites: CE 233.
Corequisites: None.
Registration Information: None.

CE 341 Introduction to Transportation Engineering 3(2-2)
Spring.
Introduction to transportation systems and study of basic traffic analysis, intersection geometry, roadside and cross-section design, signal design, traffic control and laboratory activities.
Prerequisites: CET 222 or EN 212.
Corequisites: None.
Registration Information: None.

CE 351 Hydraulics with Lab 3(2-2)
Fall.
Study and in-depth analysis of non-compressible fluids using analytical methods and calculus including the flow of water in pipes and open channels. Laboratory involves measuring static pressure, head losses, and flow rates.
Prerequisites: EN 211.
Corequisites: None.
Registration Information: None.

CE 361 Construction Engineering 4(4-0)
Spring.
Basics of engineering economics, project scheduling, earned-value analysis, and project management including business, public policy, leadership, team work, sustainability, professional ethics, and estimating.
Prerequisites: None.
Corequisites: None.
Registration Information: Junior standing or permission of instructor.

CE 391 Special Topics 1-5(1-5-1-5)
As Needed.
Selected topics in civil engineering.
Prerequisites: None.
Corequisites: None.
Registration Information: Junior status or permission of instructor.

CE 395 Independent Study 1-5(1-5-1-5)
As Needed.
Intensive study in civil engineering directed by a faculty member.
Prerequisites: None.
Corequisites: None.
Registration Information: Junior status or permission of instructor.

CE 396 Cooperative Education Placement 1-5(1-5-1-5)
As Needed.
Work experience in civil engineering under the direction of a field supervisor and a faculty member.
Prerequisites: None.
Corequisites: None.
Registration Information: Junior status or permission of instructor.

CE 404 (CET 404) Structural Steel Design 3(3-0)
Fall.
Structural steel design of beams, columns, girders and trusses to AISC standards.
Prerequisites: CE 331 or CET 316.
Corequisites: None.
Registration Information: None.

CE 405 (CET 405) Reinforced Concrete Design 3(3-0)
Spring.
Design of reinforced concrete beams, columns, girders and floor systems to conform to current ACI code.
Prerequisites: CE 331 or CET 316.
Corequisites: None.
Registration Information: None.

CE 412 (CET 412) Hydrology 3(3-0)
Spring.
Hydrologic cycle including precipitation, streamflow, ground-water runoff and the preparation of hydro graphs and frequency analysis.
Prerequisites: CE 351 or CET 317.
Corequisites: None.
Registration Information: None.

CE 415 (CET 415) Water & Sewer System Design 3(3-0)
Fall.
Fundamental principles of water supply and sewage design.
Prerequisites: CE 351 or CET 317 and CHEM 111.
Corequisites: None.
Registration Information: None.

CE 421 Geotechnical Engineering II 3(3-0)
Spring.
Analysis and design of slopes and foundations including retaining wall, shallow footings, deep foundations, pile foundations, mat foundations, earthquake loads, cofferdams, caissons, liquefaction and problems soils.
Prerequisites: CE 321.
Corequisites: None.
Registration Information: None.

CE 473 (CET 473) Highway Design 3(3-0)
Fall.
A study of highway planning and design.
Prerequisites: CE 321 or CET 315 and CE 341 or CET 372 and CET 208 and MATH 126.
Corequisites: None.
Registration Information: None.

CE 487 Senior Project Seminar 1(1-0)
Fall.
Be familiar with engineering analysis & design process in global, economic, environmental, & societal contexts. Create a collaborative and inclusive environment to establish goals, plan tasks & present the senior project.
Prerequisites: None.
Corequisites: None.
Registration Information: Senior standing.

CE 489 Senior Design Project 3(1-4)
Spring.
Application of civil engineering principles to plan, analysis, design, and make an execution plan of a realistic civil engineering project. Students prepare technical reports and make oral presentations.
Prerequisites: CE 487.
Corequisites: None.
Registration Information: None.

CE 491 Special Topics 1-5(1-5-1-5)
As Needed.
Selected topics in civil engineering.
Prerequisites: None.
Corequisites: None.
Registration Information: Senior status or permission of instructor.

CE 495 Independent Study 1-5(1-5-1-5)
As Needed.
Intensive study in civil engineering directed by a faculty member.
Prerequisites: None.
Corequisites: None.
Registration Information: Senior status or permission of instructor.

CE 496 Cooperative Education Placement 1-5(1-5-1-5)
As Needed.
Work experience in civil engineering under the direction of a field supervisor and a faculty member.
Prerequisites: None.
Corequisites: None.
Registration Information: Senior status or permission of instructor.

Engineering (EN)

EN 101 Introduction to Engineering 2(2-0)
Fall, Spring.
Introduction to engineering curriculum and careers. Problem solving and creativity. Spreadsheets, word processing and other computer skills.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EN 103 Problem Solving for Engineers 3(2-2)
Fall, Spring.
Writing computer programs to solve real-world problems in engineering and science.
Prerequisite: MATH 120.
Corequisite: None.
Registration Information: None.

EN 107 Engineering Graphics 2(1-2)
Fall, Spring.
Introduction to the preparation of engineering drawings using freehand sketching and computer graphics software.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EN 109 Introduction to Sustainability 2(2-0)
Fall.
Interdisciplinary foundation for sustainability including systems theory, humans and the environments, and the social and economic dimensions of sustainability.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EN 211 Engineering Mechanics I 3(3-0)
Fall.
Introduction to the relationship between forces and moments acting on an object that is in equilibrium (statics).
Prerequisite: MATH 207 and PHYS 221.
Corequisite: None.
Registration Information: None.

EN 212 Engineering Mechanics II 3(3-0)
Spring.
Introduction to the relationship between forces and moments acting on rigid objects and the motion of objects (dynamics).
Prerequisite: EN 211.
Corequisite: None.
Registration Information: None.

EN 215 Introduction to Industrial and Systems Engineering 3(3-0)
Fall.
Engineering viewpoints of the principles of organization for production and the operations applicable to accomplishing organizational responsibilities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EN 231 Circuit Analysis I 4(4-0)
Fall.
Circuit concepts, conventions and network equations. Initial conditions and classical methods of obtaining transient and steady-state solutions.
Prerequisite: EN 231L and MATH 207 and PHYS 222.
Corequisite: None.
Registration Information: None.

EN 231L Circuit Analysis I Lab 1(0-2)
Fall.
Observation and analysis of electrical circuits involving resistance, inductance and capacitance.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 231 strongly recommended as corequisite.

EN 232 Circuit Analysis II 4(4-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

EN 260 Basic Electronics 3(3-0)
Spring.
Characteristics, operation, and basic circuits of solid-state devices. Operational amplifiers with typical applications are also introduced.
Prerequisite: EN 231.
Corequisite: None.
Registration Information: None.

EN 263 Electromechanical Devices 3(3-0)
As Needed.
DC and AC motors and generators, transformers, stepper motors, servomotors and various sensors: theory, device characteristics, applications and controls.
Prerequisite: EN 103 and EN 212 and EN 231 and EN 260.
Corequisite: None.
Registration Information: None.

EN 275 Stochastic Systems 4(4-0)
Fall.
Noncalculus probability modeling and statistical analysis of systems containing elements of uncertainty.
Prerequisite: MATH 101.
Corequisite: None.
Registration Information: None.

EN 286 Group Dynamics for Teams 3(3-0)
Spring.
Group Dynamics applied to teams. Team development, basic team processes, conflict management, decision making, leadership, problem solving, and impacts of diversity and culture on teams.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EN 291 Special Topics (1-5 V)
As Needed.
Selected topics in engineering.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

EN 292 Research (1-6 V)
As Needed.
Research closely supervised by a faculty member with regular meetings.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

EN 295 Independent Study (1-5 V)
As Needed.
Intensive study directed by a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

EN 296 Cooperative Education Placement (1-5 V)
Fall, Spring.
Work experience under direction of a field supervisor and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Freshman or sophomore standing. Repeatable (99).

EN 298 Internship (1-6 V)
As Needed.
Field work in a company or organization, with written reports.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

EN 301 Fluid Mechanics 4(4-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

EN 321 Thermodynamics 3(3-0)
Fall.
Introduction to energy equations and flows, entropy, kinetic theory and statistical mechanics, second law of thermodynamics, heat engines and heat transfer.
Prerequisite: PHYS 221.
Corequisite: None.
Registration Information: None.

EN 324 Materials Science and Engineering 3(3-0)
Spring.
Fundamentals of chemical structure and atomic bonding, material properties, deformations under force, stress-strain relationships, selection of materials.
Prerequisite: PHYS 221.
Corequisite: None.
Registration Information: High school chemistry required as prerequisite. EN 324L strongly recommended as corequisite.

EN 324L Materials Science and Engineering Lab 1(0-2)
Spring.
Measurements of material properties and stress-strain relationships.
Prerequisite: EN 211.
Corequisite: None.
Registration Information: EN 324 strongly recommended as corequisite.

EN 343 Engineering Economy 3(3-0)
Fall.
Modeling, analysis and decision making involving time value of money, depreciation, income taxes and replacement analysis.
Prerequisite: MATH 120.
Corequisite: None.
Registration Information: None.

EN 351 Heat Transfer 3(3-0)
As Needed.
Steady and unsteady conduction of heat. Convection heat transfer in boundary layer and duct flows. Forced and free convection. Thermal radiation.
Prerequisite: EN 321.
Corequisite: None.
Registration Information: None.

EN 360 Control Systems I 2(2-0)
As Needed.
Linear analog control systems theory is introduced. Open and closed-loop systems are examined, and performance characteristics are analyzed.
Prerequisite: EN 260 and MATH 337.
Corequisite: None.
Registration Information: EN 360L strongly recommended as corequisite.

EN 360L Control Systems I Lab 1(0-2)
Fall.
Control Systems I Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 360 strongly recommended as corequisite.

EN 361 Digital Electronics 3(3-0)
Spring.
Introduction to digital technology emphasizing practical microprocessors. Number systems and codes, truth tables, Boolean functions, combinational and sequential logic, registers, counters, memory devices & microprocessors.
Prerequisite: EN 260.
Corequisite: None.
Registration Information: EN 361L strongly recommended as corequisite.

EN 361L Digital Electronics Lab 1(0-2)
Spring.
Digital Electronics Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 361 strongly recommended as corequisite.

EN 362 Introduction to Mechatronics 2(2-0)
Fall.
Elements of a mechatronics system: signal conditioning, sensors, actuators, microcontrollers, and software.
Prerequisite: EN 263.
Corequisite: None.
Registration Information: EN 362L strongly recommended as corequisite.

EN 362L Mechatronics Lab 1(0-2)
Fall.
Mechatronics Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 362 strongly recommended as corequisite.

EN 363 Virtual Machine Design 2(2-0)
Spring.
Computer aided design of machines including mechanical components: shaft systems, power transmission, and motion generation.
Prerequisite: EN 324.
Corequisite: None.
Registration Information: EN 363L strongly recommended as corequisite.

EN 363L Virtual Machine Design Lab 1(0-2)
Spring.
Virtual Machine Design Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 363 strongly recommended as corequisite.

EN 375 Stochastic Systems Engineering 3(3-0)
Fall.
Probability modeling and statistical analysis of engineering systems containing elements of uncertainty.
Prerequisite: MATH 126.
Corequisite: None.
Registration Information: None.

EN 405 Advanced Programming 3(3-0)
As Needed.
Crafting efficient computer programs to solve large-scale engineering problems. Object oriented programming, data structures and algorithms, algorithmic complexity analysis.
Prerequisite: EN 103.
Corequisite: None.
Registration Information: May take equivalent of EN 103.

EN 420 Simulation Experiments 4(3-2)
Spring.
Design and statistical analysis of experiments using discrete event simulation models.
Prerequisite: EN 375.
Corequisite: None.
Registration Information: None.

EN 430 Project Planning and Control 3(3-0)
Fall.
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 375.
Corequisite: None.
Registration Information: None.

EN 435 Microprocessor Control Systems 3(2-2)
As Needed.
Components of a microprocessor control system, digital processing, survey of state-of-the-art micro-processor control systems.
Prerequisite: EN 360.
Corequisite: None.
Registration Information: None.

EN 439 Time and Motion Studies 2(1-2)
Fall.
Principles and techniques of methods analysis and work measurement, human performance in human-machine systems.
Prerequisite: EN 215 and EN 375.
Corequisite: None.
Registration Information: None.

EN 440 Safety Engineering 3(3-0)
Spring.
Occupational safety & health in different industrial environments. Theories of accident causation, government regulation, hazards, equipment, & safety administration.
Prerequisite: EN 343 and EN 439.
Corequisite: None.
Registration Information: None.

EN 441 Engineering of Manufacturing Processes 3(3-0)
Spring.
Materials and processes for manufacturing including machining, casting, and forming processes: design, modeling and control.
Prerequisite: EN 212.
Corequisite: None.
Registration Information: EN 441L strongly recommended as corequisite.

EN 441L Engineering & Manufacturing Proc Lab 1(0-2)
Spring.
Engineering & Manufacturing Proc Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 441 strongly recommended as corequisite.

EN 442 Manufacturing Processes II 3(3-0)
As Needed.
Materials and processes for manufacturing including sheet metal forming, welding, machining and advanced manufacturing processes.
Prerequisite: EN 342.
Corequisite: None.
Registration Information: None.

EN 443 Quality Control and Reliability 3(3-0)
Spring.
Principles/methods of quality control/improvement. Quality management: design & implementation, problem solving techniques, quality improvement tools, etc. Statistical quality control: charts, evaluation, sampling, etc.
Prerequisite: EN 275 or EN 375.
Corequisite: None.
Registration Information: None.

EN 460 Control Systems II 2(2-0)
Spring.
Advanced control systems analysis, including microprocessor-based control systems analysis, A/D and D/A converters, Z transforms, and stepper motors.
Prerequisite: EN 360.
Corequisite: None.
Registration Information: EN 460L strongly recommended as corequisite.

EN 460L Control Systems II Lab 1(0-2)
Spring.
Control Systems II Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 460 strongly recommended as corequisite.

EN 462 Industrial Robotics 2(2-0)
Spring.
Basic robotics principles; robot interfacing; robot controls and programming. Laboratory exercises use various robots to meet specific industrial tasks.
Prerequisite: EN 460 and EN 473.
Corequisite: None.
Registration Information: EN 462L strongly recommended as corequisite.

EN 462L Industrial Robotics Lab 1(0-2)
Spring.
Industrial Robotics Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 462 strongly recommended as corequisite.

EN 471 Operations Research 3(3-0)
Fall.
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 and MATH 224.
Corequisite: None.
Registration Information: None.

EN 473 Computer Integrated Manufacturing 2(2-0)
Fall.
Engineering design, modeling and applications in production: automation, flowlines, robotics, numerical control, and computer usage in manufacturing.
Prerequisite: EN 103 and EN 231 and EN 231L and EN 441 and MATH 207.
Corequisite: None.
Registration Information: EN 473L strongly recommended as corequisite.

EN 473L Computer Integrated Mfg Lab 1(0-2)
Fall.
Computer Integrated Mfg Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 473 strongly recommended as corequisite.

EN 475 Facility Planning and Design 3(3-0)
Fall.
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.
Prerequisite: EN 439 and EN 471.
Corequisite: None.
Registration Information: None.

EN 477 Operations Planning and Control 3(3-0)
Spring.
Techniques for analysis and management of manufacturing operations and production with emphasis on inventory systems and forecasting.
Prerequisite: EN 471.
Corequisite: None.
Registration Information: None.

EN 486 Senior Seminar 2(2-0)
Fall.
Steps in the engineering design process including creativity, technical analysis, and presentations. Prepare for senior project.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

EN 487 Engineering Design 3(3-0)
Spring.
Application of engineering principles to a design project.
Prerequisite: EN 486.
Corequisite: None.
Registration Information: None.

EN 488 Industrial Engineering Design 3(3-0)
Spring.
Application of engineering principles to a design project.
Prerequisite: EN 486.
Corequisite: None.
Registration Information: None.

EN 489 Senior Capstone in Sustainability 1(1-0)
Spring.
Application of knowledge gained in the sustainability minor to a project in sustainability.
Prerequisite: CHEM 125 and EN 109.
Corequisite: None.
Registration Information: None.

EN 491 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing. Repeatable (99).

EN 492 Research (1-6 V)
As Needed.
Faculty directed research project.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Repeatable (99).

EN 495 Independent Study (1-5 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing. Repeatable (99).

EN 496 Cooperative Education Placement (1-5 V)
Fall, Spring.
Work experience under the direction of a field supervisor and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Repeatable (99).

EN 498 Internship (1-6 V)
As Needed.
Field work in a company or organization, with written reports.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Repeatable (99).

EN 503 Ergonomics 3(3-0)
Spring.
Theory/practice of human performance measurement & factors engineering. Study of human sensory/perceptive/mental/psychomotor applied to the design of human-machine systems for performance/effectiveness/productivity/safety.
Prerequisite: EN 540.
Corequisite: None.
Registration Information: None.

EN 504 Scheduling and Sequencing 3(3-0)
Spring.
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.
Corequisite: None.
Registration Information: None.

EN 505 Advanced Programming 3(3-0)
As Needed.
Crafting efficient computer programs to solve large-scale engineering problems. Object oriented programming, data structures and algorithms, algorithmic complexity analysis.
Prerequisite: EN 103.
Corequisite: None.
Registration Information: May take equivalent of EN 103.

EN 507 Virtual Reality 3(3-0)
Fall.
Principles, practical aspects, and applications of virtual reality systems and components such as 3D interfaces, displays (3D, visual, haptic, auditory), position tracking, and virtual environments.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EN 511 Structural Engineering 3(3-0)
Fall.
Design and analysis of wood, steel and concrete structures in railroad application.
Prerequisite: EN 211 and EN 212.
Corequisite: None.
Registration Information: None.

EN 513 Artificial Intelligence 3(3-0)
Spring.
Topics in artificial intelligence including predicate calculus, search strategies, and machine learning with applications.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EN 520 Simulation Experiments 4(3-2)
Spring.
Design and statistical analysis of experiments using discrete event simulation models.
Prerequisite: EN 375.
Corequisite: None.
Registration Information: None.

EN 525 Modeling & Simulation 3(3-0)
As Needed.
Analysis and evaluation of real systems by using modern simulation methods such as System Dynamics and Multi-Agent-Based Modeling in engineering and business.
Prerequisite: BSAD 265 or EN 375.
Corequisite: None.
Registration Information: A college course on inferential statistics.

EN 528 Systems Theory & Applications 3(3-0)
As Needed.
A detailed description of different perspectives to analyze and understand the value of the systems perspective in addressing complex systems problems faced by managers in technology-based enterprises.
Prerequisite: MGMT 201.
Corequisite: None.
Registration Information: None.

EN 530 Project Planning and Control 3(3-0)
Spring.
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: None.
Corequisite: None.
Registration Information: None.

EN 531 Railroad Power Systems 3(3-0)
As Needed.
Comprehensive analysis and design of electric power systems for railroads including power supplies, AC/DC and linear motors, third rails, catenaries, and substations/distribution systems.
Prerequisite: EN 231 and EN 231L and EN 263 and EN 360.
Corequisite: None.
Registration Information: None.

EN 539 Time and Motion Studies 2(1-2)
Fall.
Principles and techniques of methods analysis and work measurement, human performance in human-machine systems. Introduction to research in selected topics.
Prerequisite: None.
Corequisite: EN 375.
Registration Information: None.

EN 540 Safety Engineering 3(3-0)
Spring.
Occupational safety and health. Theories of accident causation, governmental regulation, protective equipment, hazard analysis, safety programs design and administration. Introduction to research in selected topics.
Prerequisite: EN 375.
Corequisite: None.
Registration Information: None.

EN 541 Engineering of Manufacturing Processes 3(3-0)
Spring.
Materials and processes for manufacturing including machining, casting, and forming processes: design, modeling and control. Introduction to research in selected topics.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 541L strongly recommended as corequisite. Permission of instructor.

EN 541L Engineering & Manufacturing Proc Lab 1(0-2)
Spring.
Engineering & Manufacturing Proc Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 541 strongly recommended as corequisite.

EN 543 Quality Control and Reliability 3(3-0)
Spring.
Design and implementation of quality programs, quality improvement tools, control charts, process capability evaluation, acceptance sampling procedures. Introduction to research in selected topics.
Prerequisite: EN 275 or EN 375.
Corequisite: None.
Registration Information: None.

EN 544 Advanced Engineering Economics 3(3-0)
Spring.
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.
Corequisite: None.
Registration Information: Permission of instructor.

EN 551 Fleet Management 3(3-0)
As Needed.
Fleet management business and economics, risk analysis, information systems, vehicle planning and control, productivity, safety, and environmental compliance.
Prerequisite: EN 343 and EN 375 and EN 471 and EN 530 and EN 577.
Corequisite: None.
Registration Information: None.

EN 552 Vehicle Dynamics 3(3-0)
As Needed.
Fundamental dynamic considerations in designing ground vehicles and vehicle control systems. Rail systems as an example of modeling dynamic systems at various levels of abstraction.
Prerequisite: EN 211 and EN 212 and EN 231 and EN 263.
Corequisite: None.
Registration Information: None.

EN 556 (MATH 556) Design & Analysis of Experiments 3(3-0)
Summer.
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 MATH 356.
Corequisite: None.
Registration Information: None.

EN 560 Control Systems II 2(2-0)
Spring.
Advanced control systems analysis, including microprocessor-based control systems analysis, A/D and D/A convertors, Z transforms, and stepper motors. Introduction to research in selected topics.
Prerequisite: EN 360 and EN 361.
Corequisite: None.
Registration Information: EN 560L strongly recommended as corequisite.

EN 560L Control Systems II Lab 1(0-2)
Spring.
Control Systems II Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 560 strongly recommended as corequisite.

EN 561 Advanced Controls 3(3-0)
Fall.
State-spaced based analysis/design of linear control systems are introduced in both continuous- and discrete-time domains. Nonlinear systems and the linearization method are covered.
Prerequisite: EN 360.
Corequisite: None.
Registration Information: None.

EN 562 Industrial Robotics 2(2-0)
Spring.
Basic robotics principles; robot interfacing; robot controls and programming. Laboratory exercises use various robots to meet specific industrial tasks. Introduction to research in selected topics.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 562L strongly recommended as corequisite. Permission of instructor.

EN 562L Industrial Robotics Lab 1(0-2)
Spring.
Industrial Robotics Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 562 strongly recommended as corequisite.

EN 563 Intelligent Robotics 3(3-0)
Spring.
Theoretical and practical aspects of advanced robotic topics such as trajectory generation, path planning and control, decision logic, advanced sensors, autonomous mobile robots, and humanoids.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

EN 565 Stochastic Systems Engineering 3(3-0)
As Needed.
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 MATH 356.
Corequisite: None.
Registration Information: None.

EN 571 Operations Research 3(3-0)
Fall.
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.
Corequisite: None.
Registration Information: Graduate standing.

EN 573 Computer Integrated Manufacturing 2(2-0)
Fall.
Ingineering design, modeling and applications for production automation, flowlines, robotics, numerical control, and computer usage in manufacturing. Introduction to research in selected topics.
Prerequisite: EN 541.
Corequisite: None.
Registration Information: EN 573L strongly recommended as corequisite.

EN 573L Computer Integrated Mfg Lab 1(0-2)
Fall.
Computer Integrated Mfg Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 573 strongly recommended as corequisite.

EN 575 Facilities Planning and Design 3(3-0)
Fall.
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.
Prerequisite: None.
Corequisite: EN 571.
Registration Information: None.

EN 577 Operations Planning and Control 3(3-0)
Spring.
Techniques for analysis and management of manufacturing operations and production with emphasis on inventory systems and forecasting.
Prerequisite: EN 571.
Corequisite: None.
Registration Information: Permission of instructor.

EN 578 Decision Making under Uncertainty 3(3-0)
As Needed.
A broad introduction to algorithms for decision making under uncertainty covering a wide variety of topics related to decision making, introducing the underlying mathematical problem formulations and their algorithms.
Prerequisites: BSAD 265 or EN 565.
Corequisites: None.
Registration Information: A college course on inferential statistics.

EN 585 Program Capstone 3(3-0)
As Needed.
Program Capstone for students finishing the Master in Engineering Management.
Prerequisite: None.
Corequisite: None.
Registration Information: 12 credit hours (Master in Engineering Management core courses) and graduate standing.

EN 588 Graduate Projects 3(3-0)
As Needed.
Application of graduate industrial engineering principles to a capstone design project.
Prerequisite: EN 520 and EN 571 and EN 575 and EN 577.
Corequisite: None.
Registration Information: Repeatable (99).

EN 590 Special Projects (1-3 V)
As Needed.
Individual project selected, outlined and pursued by student.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Approval of advisor. Repeatable (99).

EN 591 Special Topics (1-3 V)
Spring.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

EN 593 Graduate Seminar 2(2-0)
Fall.
Seminar for students entering the systems engineering program. Philosophical, methodological and ethical issues in systems engineering are discussed.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

EN 595 Independent Study (1-5 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

EN 598 Internship (1-6 V)
As Needed.
Field work in a company or organization, with written reports.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

EN 599 Thesis Research (1-9 V)
Fall, Spring.
Preparation of thesis to meet degree requirements. Arranged with major advisor.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Approval of advisor. Repeatable (6).

Transportation Engineering (TENG)

TENG 140 Railway Basics & Safety 3(3-0)
As Needed.
Introduction to railway materials, infrastructure, different aspects of operations, innovation policy, vehicle dynamics, power, rolling stock, maintenance, and structural, operational, socio-economic and environmental safety.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

TENG 405 Multimodal Transportation Systems 3(3-0)
As Needed.
Overview of materials, infrastructure, operations, safety and future aspects of ground, water and air transportation systems.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

TENG 415 Supply-Chain & Logistics Management 3(3-0)
As Needed.
Analysis, design, operation, and evaluation of supply chain and logistics systems including concepts, demand forecast, transformation of demand into supply, national and international policy and efficient transportation.
Prerequisites: MATH 101.
Corequisites: None.
Registration Information: None.

TENG 440 Railway Transportation 3(3-0)
As Needed.
Comprehensive study of railway geotechniques, infrastructure, road dynamics, power systems, operations, efficiency, safety, engineering analysis and design.
Prerequisites: PHYS 201.
Corequisites: None.
Registration Information: None.

Civil Engineering, Bachelor of Science in Civil Engineering

This undergraduate civil engineering program leads to the Bachelor of Science in Civil Engineering (BSCE) degree. The degree program prepares graduates for entry level positions in activities associated with the analysis, planning, design, construction, and maintenance of infrastructure systems including airports, bridges, buildings, water supply, water treatment and disposal, flood mitigation, and roadway systems. Civil engineers are concerned with the impact that projects have to the public and the environment. This baccalaureate program will expose students to the following areas of civil engineering.

- Structural Engineering
- Transportation systems engineering
- Hydraulic and Hydrologic engineering

- Construction Engineering
- Geotechnical Engineering

Specific Admission Requirements

In order to be considered for admission to the BSCE as an incoming freshman, a student must:

- Be placed into MATH 126 Calculus and Analytic Geometry I (5 Credit Hours) or higher.
- Have a high school GPA of 2.50 or higher on a 4.0 scale.

Student Learning Outcomes

1. to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Specific Program Requirements

Course	Title	Credits
General Education	**CID 103 is a preferred for Humanities**	**24**
Required Courses		**95**
CE 101	Introduction to Civil Engineering	2
CE 233	Strength of Materials with Lab	3
CE 321	Geotechnical Engineering I	3
CE 331	Structural Analysis	3
CE 341	Introduction to Transportation Engineering	3
CE 351	Hydraulics with Lab	3
CE 361	Construction Engineering	4
CE 404	Structural Steel Design	3
CE 405	Reinforced Concrete Design	3
CE 412	Hydrology	3
CE 415	Water & Sewer System Design	3
CE 421	Geotechnical Engineering II	3
CE 473	Highway Design	3
CE 487	Senior Project Seminar	1
CE 489	Senior Design Project	3
CET 102	Surveying I	3
CET 208	Concrete and Asphalt Materials	3
CET 115	Civil Drafting I	3
CET 116	Civil Drafting II	3
CET 207	Construction Materials and Methods	3
CHEM 111	Principles of Chemistry (GT-SC2)	3
CHEM 111L	Principles of Chemistry Lab (GT-SC1)	1
EN 103	Problem Solving for Engineers	3
EN 212	Engineering Mechanics II	3
EN 211	Engineering Mechanics I	3
EN 375	Stochastic Systems Engineering	3
MATH 207	Matrix and Vector Algebra with Applications	3
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
MATH 337	Differential Equations I	3
PHYS 221	General Physics I	4
PHYS 221L	General Physics I Lab (GT-SC1)	1
Additional Science Course	**Must be BIOL, GEOL, or similar prefix. Must have advisor approval.**	**3**
Technical Electives	**Must be upper division. Must be BSAD, CET, CM, EN, MGMT, MKTG or similar prefix. Advisor approval required.**	**6**
Total Credits		**128**

[1] CID 103 is preferred

Specific Graduation Requirements

1. Completion of minimum of 128 credit hours, as follows:

- Social Sciences, Humanities, & History: 24 hours
- Math & Basic Sciences: 28 hours
- Engineering Science (EN): 12 hours
- Civil Engineering (CE) & Civil Engineering Technology (CET): 58 hours
- Technical Electives: 6 hours

2. Earning of the minimum cumulative GPA of 2.00 in the Civil Engineering (CE) and Civil Engineering Technology (CET) courses.

Engineering 3+2 Program, Bachelor of Science/Master of Science

The BS/MS program allows qualified students to earn both a BS (BSE or BSIE) and MS (MSE or MSISE) concurrently (BSE/MSE, BSE/MSISE, BSIE/MSE, BSIE/MSISE). Students can complete the requirements for both degrees in five years, thus shortening the normal time to receive both degrees from six years to five years. The degrees are awarded simultaneously.

Specific Admission Requirements

Students should apply no later than the spring before the senior year. Students are required to take the GRE and to have a 3.0 GPA for regular admission to the MS programs. The application for admission must include a completed Engineering MS application form, an unofficial CSU Pueblo transcript, and GRE scores. Students are strongly encouraged to complete an internship prior to enrolling in graduate-level courses.

Specific Program Requirements

A student may take up to 9 credits of coursework taken at the 500-level while the student is in the 3+2 program that will count toward both the BSE/BSIE and MSE/MSISE degrees. Courses commonly used for such

purposes include EN 540, EN 541, EN 562, or EN 573 for BSE students; and EN 520, EN 571, EN 575, or EN 577 for BSIE students.

The 3+2 program has the following requirements:

Course	Title	Credits
BSE/BSIE Requirements	126 credits required for BSE. 130 credits required for BSIE.	126-130
MSE/MSIE Requirements	30 credits required for non-thesis option. 33 credits required for thesis option.	30-33
Total Credits		**156-163**

All other requirements for the 3+2 program in engineering are the same as for the regular master's degree. For more information, consult the Engineering (BS), Industrial and Systems Engineering (BSISE), Engineering (MS), and Industrial and Systems Engineering (MS) graduate programs.

- Engineering, Bachelor of Science in Engineering: Mechatronics Specialization (p. 480)
- Industrial & Systems Engineering, Master of Science (p. 482)
- Industrial Engineering, Bachelor of Science in Industrial Engineering (p. 483)
- Mechatronics Engineering, Master of Science (p. 485)

Engineering, Bachelor of Science in Engineering: Mechatronics Specialization

Specific Admission Requirements

Applying as an Incoming Freshman

In order to be considered for admission to the BSE or BSIE as an incoming freshman, a student must:

- Be placed into MATH 126 Calculus & Analytic Geometry I (GT-MA1) (5 c.h.), or higher.
- Have a high school GPA of 3.25 or higher on a 4.0 scale.

The number of students admitted to the BSE or the BSIE as incoming freshmen is limited. Priority is given to students with the highest GPA's and ACT/SAT scores. A student admitted as an incoming freshman may continue in the BSE or BSIE program as a sophomore if he or she completes the required first year engineering courses (EN 101 Introduction to Engineering (2 c.h.), EN 103 Problem Solving for Engineers (3 c.h.), and EN 107 Engineering Graphics (2 c.h.)) with a B or better in each course. If a student admitted as an incoming freshman does not meet the requirements to continue in the program as a sophomore, he or she is eligible to apply as a sophomore, as described below.

Applying After Completing Required First-Year Courses

A student (including a transfer student) who does not receive admission as a freshman must complete the required first year courses (EN 101 Introduction to Engineering (2 c.h.), EN 103 Problem Solving for Engineers (3 c.h.), EN 107 Engineering Graphics (2 c.h.), ENG 101 Rhetoric & Writing I (GT-CO1) (3 c.h.), ENG 102 Rhetoric & Writing II (GT-CO2) (3 c.h.), MATH 126 Calculus & Analytic Geometry I (GT-MA1) (5 c.h.), MATH 224 Calculus and Analytic Geometry II (5 c.h.), and PHYS 221 General Physics I (4 c.h.), PHYS 221L General Physics I Lab (GT-SC1) (1 c.h.)) with a grade of C or better in each course in order to be eligible to apply for admission to the BSE or BSIE as a sophomore. Admission is not guaranteed as priority is given to students with the highest GPA's.

The BSE program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org (http://www.abet.org/), under the General Criteria. This program has the following educational objectives and outcomes, which have been approved and are reviewed regularly by the BSE Advisory Board.

BSE Program Outcomes

The BSE program is designed so that students graduate from the program with the following abilities and knowledge:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. an ability to communicate effectively with a range of audiences.
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

BSE Educational Objectives

During the first few years after graduation, BSE graduates should be able to:

- Identify root causes and solve engineering problems.
- Function well as individual contributors and on multidisciplinary teams,
- Obtain jobs of increasing responsibility applying engineering skills and knowledge to a wide range of problems in a wide range of industries,
- Continue their education at the graduate level,
- Obtain additional engineering certifications,
- Design new and improve existing mechatronic systems.

Outcomes Assessment Activities

The BSE and BSIE programs and the courses in each program are designed to support the Program Outcomes listed for each degree. Each program has an Advisory Board that meets annually and the input from those Boards is used to revise the programs. The Department also uses the following assessment activities:

- During the final term of study, all engineering students are required to demonstrate their ability to apply and integrate the skills and knowledge learned in the program by producing a capstone engineering design project. This project must incorporate subject

material covered in two or more courses in the student's major, involve knowledge or skill not learned in a class thus demonstrating the student's ability to engage in life long learning, involve reflection on the impact of the proposed solution in a global and societal context, and be presented in written and oral reports to demonstrate the student's communication skills.

- All senior engineering studies are encouraged to take the Fundamentals of Engineering (FE) exam administered by the Colorado State Board of Registration for Professional Engineers. The Department periodically sets goals for and reviews the section-by-section performance of students on the FE. The results are used to identify areas of the curriculum that may need improvement.

Specific Program Requirements

Students are required to have earned a cumulative GPA of 2.000 or better in required EN courses.

Course	Title	Credits
Required EN Courses		
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 & 231L	Circuit Analysis I and Circuit Analysis I Lab	5
EN 260	Basic Electronics	3
EN 263	Electromechanical Devices	3
EN 321	Thermodynamics	3
EN 324 & 324L	Materials Science and Engineering and Materials Science and Engineering Lab	4
EN 343	Engineering Economy	3
EN 360 & 360L	Control Systems I and Control Systems I Lab	3
EN 361 & 361L	Digital Electronics and Digital Electronics Lab	4
EN 362 & 362L	Introduction to Mechatronics and Mechatronics Lab	3
EN 363 & 363L	Virtual Machine Design and Virtual Machine Design Lab	3
EN 375	Stochastic Systems Engineering	3
EN 430	Project Planning and Control	3
EN 441 & 441L	Engineering of Manufacturing Processes and Engineering & Manufacturing Proc Lab	4
EN 443	Quality Control and Reliability	3
EN 460 & 460L	Control Systems II and Control Systems II Lab	3
EN 462 & 462L	Industrial Robotics and Industrial Robotics Lab	3
EN 473 & 473L	Computer Integrated Manufacturing and Computer Integrated Mfg Lab	3
EN 486	Senior Seminar	2
EN 487	Engineering Design	3
Other Required Courses		
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
MATH 207	Matrix and Vector Algebra with Applications	3
MATH 337	Differential Equations I	3
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
General Education		15
Math/Science Electives		3
Technical Electives [1]		3
Total Credits		**130**

[1] Technical electives must be chosen from an approved list or have the approval of an Engineering adviser.

Engineering, Minor

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 under "Curriculum."

This minor is not available to students majoring in Engineering or Industrial Engineering.

Specific Program Requirements

Course	Title	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 & 231L	Circuit Analysis I and Circuit Analysis I Lab	5
EN 321	Thermodynamics	3
EN 343	Engineering Economy	3
Total Credits		**24**

Graduate Certificate in Railroad Engineering, Post-Baccalaureate Certificate

The Railroad Engineering Certificate Program is a 12-credit hour certificate program housed in the Department of Engineering. The Program is designed to prepare students with an undergraduate degree in engineering (or related field) to succeed in a career in railroad engineering. Coursework includes material from civil, electrical, industrial, and mechanical engineering.

Specific Admission Requirements

An applicant for the certificate must be admitted as a graduate student and can then complete the certificate in non-degree status. Colorado

residents can complete the certificate as guest (for credit) students. If a student decides to later purse the MS in Engineering with a concentration in Railroad Engineering, the student must apply and be accepted to that degree program; credits completed toward the certificate can be applied toward the degree.

Student Learning Outcomes

Each student will be able to

- Demonstrate advanced understanding of the fundamental knowledge which serves as the basis for practice in railroad engineering.
- Apply that knowledge in the design and analysis of a system or process to meet specified needs.

Outcomes Assessment Activities

Within the Department's existing assessment structures, the performance of Certificate students in the specific courses will be evaluated separately from other students.

Specific Program Requirements

A student will receive a Railroad Engineering Certificate after completing the following courses with a grade of B or better.

Course	Title	Credits
EN 511	Structural Engineering	3
EN 531	Railroad Power Systems	3
EN 551	Fleet Management	3
EN 552	Vehicle Dynamics	3
Total Credits		**12**

Industrial & Systems Engineering, Master of Science

Mission

The MSISE program prepares students from diverse educational backgrounds to function as engineers in advanced projects in industrial engineering and operations research and to continue their studies and obtain other advanced degrees especially at doctoral level.

Expected Student Learning Outcomes

Each MSE and MSISE graduate will be able to:

- Demonstrate advanced understanding of the fundamental knowledge which serves as the basis for practice in their chosen specialization.
- Apply those principles in the design and analysis of a system or process to meet specified needs.
- Communicate effectively in writing and orally.

By applying the following rules, the MSE and MSISE programs are designed to ensure these additional learning outcomes:

- Each student who does not have the required prerequisites in the chosen specialization takes the necessary leveling courses.
- Every MSE or MSISE graduate must demonstrate knowledge of material in the core courses in the chosen specialization.

Assessment Activities

The MSE and MSISE programs are assessed by periodically reviewing the results of various metrics such as final course exams, homework assignments, projects, project report evaluations, presentations, paper evaluations, student surveys, and exit interviews with MSE and MSISE graduated. Assessment results are used to improve the two programs.

Specific Program Requirements

The MSISE Program consists of three components:

1. **Core Component**: 15 credit hours
2. **Track Component**: 9 credit hours
3. **Elective Component**: 9 credit hours (non-thesis option), or 6 credit hours (thesis option)

Non-Thesis Total: 33 credit hours
Thesis Total: 30 credit hours

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.

Course	Title	Credits
EN 520	Simulation Experiments	4
EN 571	Operations Research	3
EN 575	Facilities Planning and Design	3
EN 577	Operations Planning and Control	3
EN 593	Graduate Seminar	2
Total Credits		**15**

If the student has an undergraduate degree in industrial engineering or a related field, some or all of the core (except EN 593 Graduate Seminar (2 c.h.)) may be waived; additional electives will replace the waived courses.

Track Component

The Track Component consists of 9 credit hours of coursework selected by the student and his or her adviser 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 adviser 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 adviser and department.

The Industrial Engineering Track

Course	Title	Credits
Select at least 9 hours from the following:		9
EN 503	Ergonomics	3
EN 504	Scheduling and Sequencing	3
EN 530	Project Planning and Control	3

EN 541	Engineering of Manufacturing Processes	3
EN 541L	Engineering & Manufacturing Proc Lab	1
EN 543	Quality Control and Reliability	3
EN 544	Advanced Engineering Economics	3
EN 573	Computer Integrated Manufacturing	2
EN 573L	Computer Integrated Mfg Lab	1
EN 588	Graduate Projects	3
EN 590	Special Projects (credits vary)	1-3
EN 591	Special Topics (credits vary)	1-3
EN 595	Independent Study (credits vary)	1-5
EN 598	Internship (credits vary)	1-6

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 adviser and department.

Elective Component

Non-Thesis Option

The Elective Component consists of 9 credit hours of coursework of courses approved as electives by the department.

Thesis Option

MS and MSISE Students choosing the Thesis Option will apply 6 credit hours of EN 599 Thesis Research (1-9 c.h.) to the Elective Component. A program of study may include more than 6 credit hours of EN 599 Thesis Research (1-9 c.h.), but no more than 6 may count towards graduation.

Prerequisites for the MS in Industrial & Systems Engineering (CSU Pueblo Course Equivalents)

Note that some of the courses listed below may have prerequisites not listed here.

- Problem Solving for Engineers (EN 103 Problem Solving for Engineers (3 c.h.))
- Engineering Economy (EN 343 Engineering Economy (3 c.h.))[1]
- Stochastic Systems Engineering (EN 375 Stochastic Systems Engineering (3 c.h.))
- Calculus I and II (MATH 126 Calculus & Analytic Geometry I (GT-MA1) (5 c.h.) and MATH 224 Calculus and Analytic Geometry II (5 c.h.))
- Calculus-Based Physics I and II (PHYS 221 General Physics I (4 c.h.) and PHYS 222 General Physics II (4 c.h.))

[1] Any material substituted for EN 343 Engineering Economy (3 c.h.) must include the time value of money topic.

Industrial Engineering, Bachelor of Science in Industrial Engineering

Specific Admission Requirements

Applying as an Incoming Freshman

In order to be considered for admission to the BSE or BSIE as an incoming freshman, a student must:

- Be placed into MATH 126 Calculus & Analytic Geometry I (GT-MA1) (5 c.h.), or higher.
- Have a high school GPA of 3.25 or higher on a 4.0 scale.

The number of students admitted to the BSE or the BSIE as incoming freshmen is limited. Priority is given to students with the highest GPA's and ACT/SAT scores. A student admitted as an incoming freshman may continue in the BSE or BSIE program as a sophomore if he or she completes the required first year engineering courses (EN 101 Introduction to Engineering (2 c.h.), EN 103 Problem Solving for Engineers (3 c.h.), and EN 107 Engineering Graphics (2 c.h.)) with a B or better in each course. If a student admitted as an incoming freshman does not meet the requirements to continue in the program as a sophomore, he or she is eligible to apply as a sophomore, as described below.

Applying After Completing Required First-Year Courses

A student (including a transfer student) who does not receive admission as a freshman must complete the required first year courses (EN 101 Introduction to Engineering (2 c.h.), EN 103 Problem Solving for Engineers (3 c.h.), EN 107 Engineering Graphics (2 c.h.), ENG 101 Rhetoric & Writing I (GT-CO1) (3 c.h.), ENG 102 Rhetoric & Writing II (GT-CO2) (3 c.h.), MATH 126 Calculus & Analytic Geometry I (GT-MA1) (5 c.h.), MATH 224 Calculus and Analytic Geometry II (5 c.h.), and PHYS 221 General Physics I (4 c.h.), PHYS 221L General Physics I Lab (GT-SC1) (1 c.h.)) with a grade of C or better in each course in order to be eligible to apply for admission to the BSE or BSIE as a sophomore. Admission is not guaranteed as priority is given to students with the highest GPA's.

The BSIE program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org (http://www.abet.org/), under the General Criteria and the Industrial Engineering and Similarly Named Programs Program Criteria. The 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:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. an ability to communicate effectively with a range of audiences.
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

BSIE Educational Objectives

During the first few years after graduation, BSIE graduates should be able to:

1. Identify root causes and solve engineering problems.
2. Function well as individual contributors and on multidisciplinary teams.
3. Obtain jobs of increasing responsibility applying industrial engineering skills and knowledge to a wide range of problems in a wide range of industries.
4. Continue their education at the graduate level.
5. Obtain additional engineering certifications.
6. Design new and improve existing production and service systems.

Outcomes Assessment Activities

The BSE and BSIE programs and the courses in each program are designed to support the Program Outcomes listed for each degree. Each program has an Advisory Board that meets annually and the input from those Boards is used to revise the programs. The Department also uses the following assessment activities:

- During the final term of study, all engineering students are required to demonstrate their ability to apply and integrate the skills and knowledge learned in the program by producing a capstone engineering design project. This project must incorporate subject material covered in two or more courses in the student's major, involve knowledge or skill not learned in a class thus demonstrating the student's ability to engage in life long learning, involve reflection on the impact of the proposed solution in a global and societal context, and be presented in written and oral reports to demonstrate the student's communication skills.
- All senior engineering studies are encouraged to take the Fundamentals of Engineering (FE) exam administered by the Colorado State Board of Registration for Professional Engineers. The Department periodically sets goals for and reviews the section-by-section performance of students on the FE. The results are used to identify areas of the curriculum that may need improvement.

Specific Program Requirements

Students are required to have earned a cumulative GPA of 2.000 or better in required EN courses.

Course	Title	Credits
Required EN Courses		
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 & 231L	Circuit Analysis I and Circuit Analysis I Lab	5
EN 321	Thermodynamics	3
EN 324 & 324L	Materials Science and Engineering and Materials Science and Engineering Lab	4
EN 343	Engineering Economy	3
EN 375	Stochastic Systems Engineering	3
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 & 441L	Engineering of Manufacturing Processes and Engineering & Manufacturing Proc Lab	4
EN 443	Quality Control and Reliability	3
EN 471	Operations Research	3
EN 473 & 473L	Computer Integrated Manufacturing and Computer Integrated Mfg Lab	3
EN 475	Facility Planning and Design	3
EN 477	Operations Planning and Control	3
EN 486	Senior Seminar	2
EN 488	Industrial Engineering Design	3
Other Required Courses		
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 207	Matrix and Vector Algebra with Applications	3
MATH 224	Calculus and Analytic Geometry II	5
MATH 337	Differential Equations I	3
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
General Education		15
Math/Science Electives		3
Technical Electives [1]		3
Total Credits		**126**

[1] Technical electives must be chosen from an approved list or have the approval of an Engineering adviser.

Industrial Engineering, Minor

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.

This minor is not available to students majoring in Engineering or Industrial Engineering.

Specific Program Requirements

Course	Title	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
Select three of the following:		8-11

EN 420	Simulation Experiments	4
EN 439	Time and Motion Studies	2
EN 440	Safety Engineering	3
EN 441 & 441L	Engineering of Manufacturing Processes and Engineering & Manufacturing Proc Lab	4
EN 443	Quality Control and Reliability	3
EN 471	Operations Research	3
EN 473 & 473L	Computer Integrated Manufacturing and Computer Integrated Mfg Lab	3
EN 475	Facility Planning and Design	3
EN 477	Operations Planning and Control	3
Total Credits		**21-24**

Lean Green Belt, Certificate

Please Note: This program is not transcripted by CSU Pueblo. This certificate will be issued and managed by the Engineering Department directly.

The Lean Green Belt Certificate Program is a 5-credit hour certificate program housed in the Department of Engineering. A lean company views itself as a part of an extended value chain, focusing on the elimination of waste between the company and its suppliers and the company and its customers. Lean is a management philosophy derived mostly from the Toyota Production System (TPS). Upon completion of this certificate, a student will have developed a deep understanding of the principles of lean manufacturing and will be able to apply these principles in manufacturing or service organizations.

Student Learning Outcomes

Students who successfully complete the Lean Green Belt Certificate Program are expected to have the ability to:

- Identify waste and propose ways to eliminate such waste; and
- Compute and apply measures related to lean processes.

Outcomes Assessment Activities

Within the department's existing assessment structures, the performance of Certificate students in the specific courses will be evaluated separately from other students.

Please Note: This program is not transcripted by CSU Pueblo. This certificate will be issued and managed by the School of Engineering directly.

Specific Program Requirements

Students do not need to apply to the program. The certificate will be issued upon completion of the required courses as the required level.

Students will receive a Lean Green Belt Certificate after completing the following courses with required grades of B or better.

Undergraduate Student

Course	Title	Credits
EN 439	Time and Motion Studies	2
EN 477	Operations Planning and Control	3
Total Credits		**5**

Graduate Student

Course	Title	Credits
EN 539	Time and Motion Studies	2
EN 577	Operations Planning and Control	3
Total Credits		**5**

Mechatronics Engineering, Master of Science

Specific 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 MSME program requires prior admission to graduate study at CSU Pueblo. Regulations governing graduate studies are contained in the university catalog under graduate programs & admissions..

Specific Program Requirements

The MSME Program consists of three components:

1. **Core Component**: 14 credit hours
2. **Track Component**: 9 credit hours
3. **Elective Component**: 10 credit hours (non-thesis option), or 7 credit hours (thesis option)

Non-Thesis Total: 33 credit hours
Thesis Total: 30 credit hours

Core Component

Course	Title	Credits
EN 507	Virtual Reality	3
EN 513	Artificial Intelligence	3
EN 561	Advanced Controls	3
EN 563	Intelligent Robotics	3
EN 593	Graduate Seminar	2
Total Credits		**14**

Track Component

The Track Component consists of 9 credit hours of coursework selected by the student and his or her adviser to advance the professional and/or educational goals of the student. In the MSME program, individualized tracks are tailored to the needs of the student. An individualized track must consist of 9 credit hours of graduate coursework subject to the approval of the adviser 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 adviser and department.

Elective Component

Non-Thesis Option

The Elective Component consists of 10 credit hours of coursework of courses approved as electives by the department.

Thesis Option

The Elective Component consists of 6 credit hours of thesis and 1 credit hour of coursework of courses approved as electives by the department.

Prerequisites for the MS in Mechatronics Engineering

(CSU-Pueblo Course Equivalents)

Note that some of the courses listed below may have prerequisites not listed here.

- Problem Solving for Engineers (EN 103 Problem Solving for Engineers (3 c.h.))
- Engineering Economy (EN 343 Engineering Economy (3 c.h.))[1]
- Calculus I and II (MATH 126 Calculus & Analytic Geometry I (GT-MA1) (5 c.h.) and MATH 224 Calculus and Analytic Geometry II (5 c.h.))
- Calculus-Based Physics I and II (PHYS 221 General Physics I (4 c.h.) and PHYS 222 General Physics II (4 c.h.))
- Engineering mechanics (statics and dynamics) (EN 211 Engineering Mechanics I (3 c.h.) and EN 212 Engineering Mechanics II (3 c.h.))
- Circuits (EN 231 Circuit Analysis I (4 c.h.) and EN 231L Circuit Analysis I Lab (1 c.h.))
- Controls (EN 360 Control Systems I (2 c.h.))
- Electromechanical devices (EN 263 Electromechanical Devices (3 c.h.))

[1] Any material substituted for EN 343 Engineering Economy (3 c.h.) must include the time value of money topic.

Specific Graduation Requirements

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

- At least 21 credit hours must be in graduate level engineering courses.
- No more than 9 credit hours of graduate coursework may be accepted as transfer credit from another institution.
- Any course taken as a prerequisite to engineering graduate study at CSU-Pueblo may not be counted towards graduation and must be taken for credit (i.e., not audited).

Pre-Engineering Program

Students seeking to specialize 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.

Students who intend to transfer elsewhere and then decide to stay at CSU Pueblo will be able to count all courses listed under "Curriculum" toward the BSE or the BSIE.

Specific Program Requirements

Course	Title	Credits
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
MATH 224	Calculus and Analytic Geometry II	5
MATH 337	Differential Equations I	3
PHYS 221 & 221L	General Physics I and General Physics I Lab (GT-SC1)	5
PHYS 222 & 222L	General Physics II and General Physics II Lab (GT-SC1)	5
EN 103	Problem Solving for Engineers	3
EN 211	Engineering Mechanics I	3
EN 212	Engineering Mechanics II	3
EN 231 & 231L	Circuit Analysis I and Circuit Analysis I Lab	5
EN 321	Thermodynamics	3
EN 324 & 324L	Materials Science and Engineering and Materials Science and Engineering Lab	4
Humanities, Social Sciences & History courses		

Six Sigma Green Belt, Certificate

The Six Sigma Green Belt Certificate Program is a 6-credit hour certificate program housed in the Department of Engineering. Six Sigma is a method of continuous process improvement. First developed at Motorola in the 1980s, the systematic approach of Define, Measure, Analyze, Improve, and Control (DMAIC) and the associated tools (such as the fishbone diagram, the Pareto chart, and ANOVA) have been widely and successfully applied. Upon completion of this certificate, a student will be able to play a major role in process improvement and will be prepared to achieve the Black Belt and Master Black Belt certifications through their company.

Student Learning Outcomes

Students who successfully complete the Six Sigma Green Belt Certificate Program are expected to have the ability to:

- Collect and analyze data, using appropriate statistical tools; and
- Select and apply appropriate Six Sigma tools to improve a process.

Outcomes Assessment Activities

Within the department's existing assessment structures, the performance of Certificate students in the specific courses will be evaluated separately from other students.

Specific Program Requirements

Students will receive a Six Sigma Green Belt Certificate after completing the following:

Undergraduate Student

Course	Title	Credits
EN 275	Stochastic Systems [1,2]	3-4
or EN 375	Stochastic Systems Engineering	
EN 443	Quality Control and Reliability [1]	3
Total Credits		**6-7**

[1] With grade of B or better.

[2] Or evidence of completion of a course equivalent to EN 275 or EN 375

Graduate Student

Course	Title	Credits
EN 375	Stochastic Systems Engineering [1,2]	3
EN 543	Quality Control and Reliability [1]	3
Total Credits		**6**

[1] With grade of B or better.
[2] Or evidence of a course equivalent to EN 275 Stochastic Systems (4 c.h.) or EN 375 Stochastic Systems Engineering (3 c.h.).

Sustainability, Certificate

The certificate in Sustainability is open to students in all majors.

Specific Program Requirements

Course	Title	Credits
EN 109	Introduction to Sustainability	2
CHEM 125	Environmental Science (GT-SC2)	3
EN 489	Senior Capstone in Sustainability	1
Sustainability Electives [1]		15
Total Credits		**21**

[1] Sustainability electives are to be selected, with approval of the student's adviser, from a list of approved sustainability electives. The electives must include three courses from outside the college of the student's major and two courses from inside the college of the student's major.

Sustainability, Minor

Attention to sustainability is a global trend. Sustainability promotes systems thinking and challenges the student to take the long view of any subject by considering the environmental, social and economic effects. Moreover, sustainability has played and will play a critical role in the future workforce. This minor provides students with the opportunity to position themselves strategically in the ever-changing workforce. It challenges students to think systemically and globally, while shaping them to become leaders.

Three core concepts in sustainability shape the minor: science and technology, economics, and social and cultural perspectives. These three are interconnected and serve as guides for the curricular pathways selected by the students in the minor.

The minor in Sustainability is open to students in all majors.

Student Learning Outcomes

The student learning outcomes are differentiated by the six levels of Bloom's taxonomy:

Knowledge

- Identify the principles and core concepts of sustainability and its role within local and global contexts.

Comprehension & Synthesis

- Explain the socio-cultural, economic, scientific and technological implications of sustainability problems and solutions from a systemic perspective.
- Synthesize the scientific and technological foundations and socioeconomic impacts of different sustainable alternatives within a local and global context to become agents of change who champion sustainable skills and principles in their communities and organizations.

Application

- Demonstrate the ability to formulate technical, operational and strategic frameworks for sustainability problems and solutions within local and global contexts.

Analysis

- Develop critical and rational thinking skills to understand systems interdependencies and emergent aspects associated with sustainability.

Evaluation

- Use the scientific method and knowledge transfer processes to assess and select different solutions for sustainability related problems, with local and global contexts.

Outcome Assessment Activities

The assessment plan for the minor consists of a two-step process initiated in the introductory courses.

1. **Pre and Post Literacy Assessment:** A questionnaire designed to measure sustainability literacy is administered at the beginning of the EN 109 Introduction to Sustainability (2 c.h.) course. The same questionnaire is applied at the beginning of the Sustainability capstone Project Course and gains in knowledge are assessed.
2. **Skills and Competencies:** During the Sustainability Capstone Experience, students are required to design and deploy a sustainability related project that will be used to assess the student learning objectives.

Specific Program Requirements

Course	Title	Credits
EN 109	Introduction to Sustainability	2
CHEM 125	Environmental Science (GT-SC2)	3
EN 489	Senior Capstone in Sustainability	1
Sustainability Electives [1]		15
Total Credits		**21**

[1] Sustainability electives are to be selected, with approval of the student's adviser, from a list of approved sustainability electives. The electives must include three courses from outside the college of the student's major and two courses from inside the college of the student's major.

Approved Sustainability Electives

ANTH 100 Cultural Anthropology (GT-SS3) (3 c.h.)

BIOL 121 Environmental Conservation (GT-SC2) (3 c.h.)

BIOL 182 College Biology II/Cellular Biology (GT-SC2) (3 c.h.)

BIOL 182L College Biology II/Cellular Bio Lab (GT-SC1) (1 c.h.)

CHEM 125L Environmental Science Laboratory (GT-SC1) (1 c.h.)

ECON 201 Principles of Macroeconomics (GT-SS1) (3 c.h.)

ECON 202 Principles of Microeconomics (GT-SS1) (3 c.h.)

EN 101 Introduction to Engineering (2 c.h.)

ENG 305 Technical and Scientific Report Writing (3 c.h.)

EPER 104 Desert Orientation (2 c.h.)

EPER 105 Canyon Orientation (2 c.h.)

GEOG 101 Physical Geography (3 c.h.)

GEOG 102 Cultural Geography (3 c.h.)

GEOG 103 World Regional Geography (GT-SS2) (3 c.h.)

PHIL 201 Classics in Ethics (GT-AH3) (3 c.h.)

POLS 201 International Relations (GT-SS1) (3 c.h.)

POLS 340 Public Policy (3 c.h.)

POLS 445 Economic Development (3 c.h.)

SOC 248 Environmental Sociology (3 c.h.)

Senior Capstone Experience

This course allows the student to bring together interdisciplinary knowledge to:

- Synthesize and apply sustainability principles and concepts to the student's major;
- Synthesize and apply sustainability principles and concepts to disciplines outside of the student's area of study or interest;
- Enhance professional skills as applied to the student's major and the sustainability discipline by demonstrating competencies including research techniques, team building, oral presentations, strategy and policy analysis and development; and
- To prepare to obtain professional certifications and future jobs.

It is expected that the student will apply the acquired knowledge, competencies and skill set in a community-based setting (through experiential education) and demonstrate the ability to effect positive change around a sustainability issue.

Sustainability Capstone Project Prerequisites

The Capstone Project will be open to students who have declared a minor in Sustainability and have completed the core requirements and at least 75% of the minor's electives. It is preferred that this capstone experience be taken in the senior year, after all other minor requirements have been met.

THE HASAN SCHOOL OF BUSINESS

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.

Undergraduate Majors

The Hasan School of Business offers undergraduate majors in accounting, business management, computer information systems, and economics. There are a variety of emphasis areas associated with the above majors (see Page 220). 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 agribusiness* prepares graduates to succeed in the specialized area of business and agriculture. The *business management major with an emphasis in marketing* prepares the graduate to successfully promote and sell goods and services. The *business management major with an emphasis in sports industry management* is a collaborative curricular effort with the Exercise Science and Health Promotion Department. Students seeking this major will have specialized managerial skills in the sports management and outdoor recreation industry. The business management major with an emphasis in organization risk and security management is a collaborative effort with Political Science Department. Students seeking this major will have specialized management skills in crisis and disaster management. The *Computer Information Systems* major prepares graduates for successful careers in the information technology (IT) fields. The *CIS major with a cyber security emphasis* prepares students for risk assessment and security design. The *CIS major with a data analytics emphasis* prepares students to store, manage, and analyze business data. The *CIS major with a software development emphasis* prepares students for software analysis, design, and implementation. *Economics* and *Economics with a Finance* emphasis 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.

CIS Minor

Non-CIS majors who wish to minor in CIS have several options. They may build their own minor based on the completion of seven core courses and a minimum of nine credits of 3/400 upper-division CIS courses.

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.

Advising

All pre-business students, business majors, and CIS majors are advised in the Hasan School of Business. Students are required to meet with an HSB advisor each term to plan their course schedules for the upcoming term. In addition, consulting with an advisor is necessary in declaring a business major, applying for an internship and filing a graduation planning sheet.

Academic Programs

Undergraduate Programs

- Accounting, Bachelor of Science in Business Administration (p. 506)
- Business Management, Bachelor of Science in Business Administration (p. 516)
- Business Management: Agribusiness Concentration, Bachelor of Science in Business Administration (p. 518)
- Business Management: Cannabis Industry Management Concentration, Bachelor of Science in Business Administration (p. 519)
- Business Management: Information Technology Concentration, Bachelor of Science in Business Administration (p. 521)
- Business Management: Organizational Risk & Security Management Concentration, Bachelor of Science in Business Administration (p. 522)
- Business Management: Sports Industry Management Concentration, Bachelor of Science in Business Administration (p. 524)
- Computer Information Systems, Bachelor of Science (p. 525)

- Computer Information Systems: Cyber Security Concentration, Bachelor of Science (p. 527)
- Computer Information Systems: Data Analytics Concentration, Bachelor of Science (p. 528)
- Computer Information Systems: Software Development Concentration, Bachelor of Science (p. 529)
- Economics, Bachelor of Science in Business Administration (p. 531)
- Economics: Finance Concentration, Bachelor of Science in Business Administration (p. 533)
- Marketing, Bachelor of Science in Business Administration (p. 536)

Minors

- Accounting, Minor (p. 508)
- Business Administration, Minor (p. 514)
- Computer Information Systems, Minor (p. 527)
- Cyber Security, Minor (p. 530)
- Data Analytics, Minor (p. 531)
- Economics, Minor (p. 533)
- Finance, Minor (p. 534)
- Marketing, Minor (p. 537)
- Supervisory Management, Minor (p. 538)

Certificates

- Foundations of Business, Certificate (p. 534)
- Jake Jabs Certificate in Professional Entrepreneurship (p. 536)
- NSA-Designated Institution Certificate in Cyber Security Defense (p. 537)
- Technology & Computing Instruction, Post-Baccalaureate Certificate (p. 538)

3+2 Programs

- Business Administration 3+2 Program, Integrated Bachelor of Science/Master of Business Administration (p. 508)
- Business Administration 3+2 Program, Integrated Computer Information Systems, Bachelor of Science/Master of Business Administration (p. 509)
- Business Administration 3+2 Program, Integrated Construction Management, Bachelor of Science/Master of Business Administration (p. 510)
- Business Administration 3+2 Program, Non-Integrated BS, BA/MBA (p. 512)
- Business Administration 3+2 Program, Non-Integrated BS,BA/MBA in Business Administration: Public Management Concentration (p. 512)
- Health Sciences General Concentration 3+2 Plan, Integrated Bachelor of Science/Master of Business Administration: Healthcare Administration Concentration (p. 534)

Graduate Programs

- Business Administration, Master of Business Administration (p. 513)
- Business Administration: Cybersecurity Concentration, Master of Business Administration (p. 515)
- Business Administration: Healthcare Administration Concentration, Master of Business Administration (p. 515)
- Business Administration: Public Management Concentration, Masters of Business Administration (p. 516)

Accounting (ACCT)

ACCT 101 Accounting for Non-Business Majors 3(3-0)
As Needed.
Survey of accounting course. Topics: accounting concepts, accounting information users, elements and purpose of financial statements, accrual accounting, internal control, and basic financial analysis.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ACCT 201 Principles of Financial Accounting 3(3-0)
As Needed.
Introduction to accounting as the language of business. Emphasis on reasoning and logic of external reporting model. May include computer-based applications.
Prerequisite: MATH 101 or MATH 109 or MATH 156 or BSAD 265.
Corequisite: None.
Registration Information: None.

ACCT 202 Principles of Managerial Accounting 3(3-0)
As Needed.
Managerial uses of accounting information, including cost-based, decision making, differential accounting, and responsibility accounting. May include computer-based applications.
Prerequisite: ACCT 201.
Corequisite: None.
Registration Information: None.

ACCT 291 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ACCT 301 Intermediate Accounting I 3(3-0)
As Needed.
Conceptual framework, accounting cycle, financial statements, time value of money, revenue recognition, and accounting for cash, receivables, inventory, and long-term assets.
Prerequisite: ACCT 202.
Corequisite: None.
Registration Information: Junior standing.

ACCT 302 Intermediate Accounting II 3(3-0)
As Needed.
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: ACCT 301.
Corequisite: None.
Registration Information: None.

ACCT 311 Federal Income Tax 3(3-0)
As Needed.
Federal income tax as applied to income recognition, exclusions from income and property transactions of individuals. Introduction to tax research resources and techniques.
Prerequisite: ACCT 202.
Corequisite: None.
Registration Information: None.

ACCT 320 Cost Accounting 3(3-0)
As Needed.
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: ACCT 202.
Corequisite: None.
Registration Information: Junior standing.

ACCT 330 Accounting Information Systems 3(3-0)
As Needed.
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: ACCT 201.
Corequisite: None.
Registration Information: None.

ACCT 401 Advanced Financial Accounting 3(3-0)
As Needed.
Application of fundamental theory to partnerships, international operations, consolidated statements, and business combinations; introduction to government.
Prerequisite: ACCT 302.
Corequisite: None.
Registration Information: None.

ACCT 404 CPA Law 3(3-0)
As Needed.
Business law as found in the Regulation section of the Uniform CPA examination.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Accounting major only.

ACCT 410 Auditing 3(3-0)
As Needed.
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: ACCT 302 and ACCT 330.
Corequisite: None.
Registration Information: None.

ACCT 411 Corporate, Estate and Gift Tax 3(3-0)
As Needed.
Taxation of corporations, partnerships, estates/trusts. Analysis of mergers and dissolution of corporations. Introduction to estate/gift taxes and international taxation.
Prerequisite: ACCT 311.
Corequisite: None.
Registration Information: None.

ACCT 412 Advanced Auditing 3(3-0)
As Needed.
Study of auditing and attestation services in the public accounting environment with special emphasis on auditing methodologies and research.
Prerequisite: ACCT 410.
Corequisite: None.
Registration Information: Permission of instructor.

ACCT 415 Accounting Ethics 3(3-0)
As Needed.
Accounting Ethics focuses on teaching students the standards of right and wrong, using various real-life corporate failures. Students apply ethical standards to solve problems.
Prerequisite: ACCT 410.
Corequisite: None.
Registration Information: None.

ACCT 491 Special Topics 1-3(1-3-1-3)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

ACCT 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Permission of advisor. Accounting major only. Repeatable (6).

ACCT 498 Internship (1-6 V)
As Needed.
Supervised field work in selected business, social and governmental organizations; supplemented by written reports.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. HSB majors only. Permission of internship coordinator. Repeatable (6).

ACCT 501 Fundamentals of Accounting 1.5(1.5-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Admission to MBA.

ACCT 505 Principles of Financial Accounting 3(3-0)
As Needed.
Introduction to accounting as the language of business. Emphasis on reasoning and logic of external reporting model. May include computer-based applications.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA.

ACCT 510 Managerial Accounting 3(3-0)
Fall, Spring.
Accounting concepts and methods utilized in managerial planning, budgeting, controlling, and evaluating to optimize decision making.
Prerequisite: ACCT 201.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

ACCT 511 Tax Planning and Research 3(3-0)
As Needed.
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: ACCT 311.
Corequisite: None.
Registration Information: Admission to MBA.

ACCT 520 Advanced Cost Management Systems 3(3-0)
As Needed.
Cost systems supporting new management philosophies, JIT, total quality management, continuous improvement, process reengineering. Activity-based costing, target costs, cost of quality.
Prerequisite: ACCT 320.
Corequisite: None.
Registration Information: Admission to MBA.

ACCT 591 Special Topics 3(3-0)
As Needed.
Critical review and discussion of relevant accounting topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Repeatable (6).

ACCT 595 Independent Study (1-3 V)
As Needed.
Individual study of a subject determined by the instructor and student with permission of the director.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Repeatable (6).

Automotive Industry Management (AIM)

AIM 105 AIM and College Life 1(1-0)
Fall, Spring.
Introduction to the industry from viewpoint of history, social impact, and future growth. Provide student exposure to AIM program policies and procedures, campus resources and college life.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AIM 110 Automotive Otto-Cycle Engines I MLR 1(1-0)
Fall.
Design and operational theory of Otto cycle automotive gasoline engines.
Prerequisites: None.
Corequisites: AIM 110L.
Registration Information: None.

AIM 110L Automotive Otto-Cycle Engines I MLR Lab 2(0-4)
Fall.
Practical experience with MLR related engine tasks focusing on compression, lubrication, cooling system and camshaft/timing belt service.
Prerequisites: None.
Corequisites: AIM 110.
Registration Information: None.

AIM 120 Automotive Electrical Systems I MLR 2(2-0)
Fall.
Design, theory and operation of electrical/electronic fundamentals including Ohm's law, series & parallel circuits, AC, DC, engine electrical systems; battery, starting, charging and inclusive of accessory system.
Prerequisite: None.
Corequisite: AIM 120L.
Registration Information: None.

AIM 120L Automotive Electrical Systems I Lab MLR 2(0-4)
Fall.
Practical experience with MLR-related automotive electrical systems service focused on engine electrical systems; battery, starting, charging and inclusive of accessory electrical systems.
Prerequisite: None.
Corequisite: AIM 120.
Registration Information: None.

AIM 130 Automotive Brake Systems MLR 1(1-0)
Spring.
Design and operational theory of automotive brake systems.
Prerequisite: None.
Corequisite: AIM 130L.
Registration Information: None.

AIM 130L Automotive Brake Systems MLR Lab 2(0-4)
Spring.
Practical experience with MLR-related automotive brake systems service.
Prerequisite: None.
Corequisite: AIM 130.
Registration Information: None.

AIM 155 Automotive Parts Operations 4(4-0)
As Needed.
Study of automotive industry management theory and styles of store operations including customer service skills, associate interaction, managerial responsibilities. Product and parts catalog knowledge/ advertising.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AIM 160 Automotive Manual Transmissions & Drive Lines MLR 1(1-0)
Spring.
Design and operational theory of manually shifted helical geared transmissions, clutches & remaining drive line including final drives.
Prerequisite: None.
Corequisite: AIM 160L.
Registration Information: None.

AIM 160L Auto Manual Transmissions & Drive Line MLR Lab 1(0-2)
Spring.
Practical experience with MLR-related automotive automatic transmission service.
Prerequisite: None.
Corequisite: AIM 160.
Registration Information: None.

AIM 210 Automotive Engine Performance MLR 2(2-0)
Fall.
Design, theory and operation of gasoline engine performance related to: compression, volumetric efficiency, thermal efficiency, operating temperature, ignition timing, air/fuel mixture ratio and exhaust emissions.
Prerequisite: AIM 110 and AIM 110L and AIM 120 and AIM 120L.
Corequisite: AIM 210L.
Registration Information: None.

AIM 210L Automotive Engine Performance MLR Lab 2(0-4)
Fall.
Practical experience with MLR-related automotive engine performance service.
Prerequisite: AIM 110 and AIM 110L and AIM 120 and AIM 120L.
Corequisite: AIM 210.
Registration Information: None.

AIM 220 Automotive Electrical Systems II MLR/AST 2(2-0)
Spring.
Theory, design and operation of digital/electronic managed automotive systems including OBD II, engine, drive train, brakes, vehicle stability, traction control, accessories and HVAC.
Prerequisite: AIM 120 and AIM 120L.
Corequisite: AIM 220L.
Registration Information: None.

AIM 220L Automotive Electrical Systems II MLR/AST Lab 2(0-4)
Spring.
Practical experience with automotive electrical systems service focused digital/electronic management systems related to OBD II, engine, drive train, brakes, vehicle stability, traction control, OBD II, accessories, HVAC.
Prerequisite: AIM 120 and AIM 120L.
Corequisite: AIM 220.
Registration Information: None.

AIM 230 Automotive Suspension & Steering Systems MLR 1(0-1)
Spring.
Design and operational theory of automotive suspension and steering systems.
Prerequisite: None.
Corequisites: AIM 230L.
Registration Information: None.

AIM 230L Automotive Suspension & Steering Systems MLR Lab 2(0-4)
Spring.
Practical experience with MLR-related automotive suspension & steering service.
Prerequisite: None.
Corequisites: AIM 230.
Registration Information: None.

AIM 260 Automotive Automatic Transmission/Transaxles MLR 1(1-0)
Spring.
Design and operational theory of automotive planetary geared automatic transmissions.
Prerequisite: AIM 160 and AIM 160L.
Corequisites: AIM 260L.
Registration Information: None.

AIM 260L Auto Automatic Transmission/Transaxle MLR Lab 1(0-2)
Spring.
Practical experience with MLR-related planetary geared automatic transmission/transaxle service.
Prerequisite: AIM 160 and AIM 160L.
Corequisites: AIM 260.
Registration Information: None.

AIM 265 Automotive Parts Management Systems 4(3-2)
As Needed.
Introduce students to aftermarket store operations, inventory and distribution management. Emphasis is on hands-on store operations, business contacts, job placement and internship.
Prerequisite: AIM 105 and AIM 155.
Corequisite: None.
Registration Information: None.

AIM 296 Cooperative Education Placement (1-5 V)
Fall, Spring.
Supervised industrial field work.
Prerequisite: None.
Corequisite: None.
Registration Information: AIM major only.

AIM 305 Regulatory, Enviro, Health Issues 3(3-0)
As Needed.
A study of automotive regulatory issues to include, OSHA, SDS, RTK, health and environmental issues.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AIM 325 Fuels & Lubrication Prod, Market, & Conservation 3(3-0)
As Needed.
Petroleum industry; basic production processes, marketing techniques, alternate fuel sources, and conservation techniques.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AIM 345 Advanced Automotive Systems 5(3-4)
As Needed.
Theory and lab experience on new concepts in automotive electrical, fuel and suspension systems.
Prerequisite: AIM 125 and AIM 125L and AIM 165 and AIM 165L and AIM 235 and AIM 235L and AIM 255 and AIM 255L.
Corequisite: None.
Registration Information: None.

AIM 355 Automotive Shop Practices 5(2-6)
Spring.
Diagnosis of electrical, fuel, engine, brake and transmission systems; study of service management and service writer duties.
Prerequisite: AIM 125 and AIM 125L and AIM 165 and AIM 165L and AIM 235 and AIM 235L and AIM 255 and AIM 255L and AIM 345.
Corequisite: None.
Registration Information: None.

AIM 405 Personal Selling Methods and Techniques 4(3-2)
As Needed.
Research, preparation and presentation methods and techniques for selling in the automotive milieu.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AIM 425 Automotive Financial Management 5(4-2)
As Needed.
Introduction to dealership operations, financial management and analysis of OEM. Emphasis to develop experience through job placement and internship.
Prerequisite: AIM 155 and AIM 265.
Corequisite: None.
Registration Information: None.

AIM 490 Special Projects (1-5 V)
As Needed.
Special interest area.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (10).

AIM 491 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (10).

AIM 495 Independent Study (1-4 V)
As Needed.
Directed, independent study of topics agreed upon by the student and instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (10).

AIM 496 Cooperative Education Placement (1-5 V)
As Needed.
Supervised industrial field work.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. AIM major only. Repeatable (10).

Business Administration (BSAD)

BSAD 101 Business-Careers and Opportunities 1(1-0)
Fall, Spring.
Introduction to the world of business that will provide insights on careers, business disciplines, and the world of business.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BSAD 102 Introduction to Personal Finance 3(1-0)
As Needed.
This introductory course serves as a vehicle to deliver fundamental personal financial management skills to students, providing the tools necessary to make good financial decisions.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BSAD 211 Introduction to Study Abroad 1(1-0)
As Needed.
Course designed to inform students about the study abroad process in order to maximize their international learning experience.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BSAD 250 Business Law 3(3-0)
As Needed.
Explores the legal environment of business. Topics include contracts, torts, agency, ethical and criminal implications of business actions, and property laws.
Prerequisite: BSAD 101 and ENG 101 and 102.
Corequisite: None.
Registration Information: None.

BSAD 265 Inferential Statistics & Problem Solving 3(3-0)
Fall, Spring, Summer.
Statistical methods in business, sampling, parameter estimation, hypothesis testing, correlation, multiple regression, and chi square tests. Use of problem solving methods.
Prerequisite: MATH 101.
Corequisite: None.
Registration Information: None.

BSAD 270 Business Communications 3(3-0)
Fall, Spring, Summer.
Means of extending management capabilities through effective internal and external communications, including data organization and presentation.
Prerequisite: ENG 101 and ENG 102.
Corequisite: None.
Registration Information: None.

BSAD 302 Ethics in Business 3(3-0)
Fall, Spring.
Examination of issues addressing ethical, legal, social and environmental responsibilities of businesses toward government, customers, employees, and the general public.
Prerequisite: BSAD 270.
Corequisite: None.
Registration Information: None.

BSAD 360 Advanced Business Statistics 3(3-0)
Fall, Spring.
Development of advanced statistical techniques to support business decision-making. Topics include advanced multiple regression analysis, analysis of variance and nonparametric techniques.
Prerequisite: BSAD 265.
Corequisite: None.
Registration Information: None.

BSAD 475 International Business 3(3-0)
Fall, Spring.
Opportunities and problems of multinational firms including environmental factors and formulation of strategies and policies for all functional areas of business.
Prerequisite: FIN 330 and MGMT 301 and MKTG 340.
Corequisite: None.
Registration Information: None.

BSAD 480 Business Consulting 3(3-0)
As Needed.
Integrating prior studies in business into a realistic approach to assist in solving problems faced by selected firms and organizations in the community.
Prerequisite: BSAD 360 and FIN 330 and MGMT 301 and MGMT 311 and MKTG 340.
Corequisite: None.
Registration Information: None.

BSAD 490 Special Projects (1-6 V)
As Needed.
Special Projects.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

BSAD 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

BSAD 493 Senior Seminar 1(1-0)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Senior standing.

BSAD 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Permission of department chair. Repeatable (6).

BSAD 498 Internship (1-6 V)
As Needed.
Supervised field work in selected business, social and governmental organizations; supplemented by written reports.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. HSB majors only. Permission of internship coordinator. Repeatable (6).

BSAD 501 Fundamentals of Statistics 3(3-0)
As Needed.
This class prepares students to solve business problems using statistics and business research methods using statistical estimation, hypothesis testing, and advanced statistical methods.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 502 Business Ethics and Environment 3(3-0)
As Needed.
The impact of continued social, political, economic, technological, and legal pressures upon ethical business issues and managerial decision making.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 505 Inferential Statistics and Problem Solving 3(3-0)
As Needed.
Statistical methods in business, sampling, parameter estimation, hypothesis testing, correlation, multiple regression and chi square tests. Use of problem solving methods.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 510 Academic Writing for MBA Students 1(1-0)
Fall.
This course is designed to help prepare students for the rigors of academic writing at the graduate and professional levels.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 545 Advanced Quantitative Analysis for Business 3(3-0)
As Needed.
This class prepares students to solve business problems using advanced quantitative methods and business modeling techniques.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 560 Managerial Analytics 3(3-0)
As Needed.
This class will explore the principles, methods, tools and best practices in contemporary applied business analytics.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 575 International Business 3(3-0)
Fall, Spring.
The objective of this course is to familiarize students with the dynamics and complexity of managing business across the globe.
Prerequisite: MGMT 201.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 580 Business Research Methodology 3(3-0)
As Needed.
Fundamentals of qualitative and quantitative research design including development of hypothesis and assessment techniques in preparation for undertaking research projects.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 591 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director. Repeatable (6).

BSAD 592 Research (1-6 V)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 595 Independent Study (1-3 V)
As Needed.
Individual study of a subject determined by the instructor and student with permission of the director.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director. Repeatable (6).

Computer Information Systems (CIS)

CIS 100 Introduction to Word 1(1-0)
Fall, Spring, Summer.
A competency-based course, topics include: file management, formatting, fonts, editing, reports, footnotes, desktop publishing, clip art, styles, outlines, tables, and mail merge.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 101 CIS Careers & Opportunities 1(1-0)
As Needed.
This course touches the various fields and career opportunities in Computer Information Systems.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 103 Introduction to PowerPoint 1(1-0)
Fall, Spring, Summer.
An introduction to PowerPoint which includes presentation templates, charts, object embedding, slide shows and other details in enhancing communications via presentation software.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 104 Introduction to Excel Spreadsheets 1(1-0)
Fall, Spring, Summer.
Includes worksheet design, text and formula manipulation, charts, lists, pivot tables, ranges, lookup tables, data analysis, functions, and macros.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 105 Introduction to Access DBMS 1(1-0)
Fall, Spring, Summer.
Course includes relational database design, table creation, data manipulation, queries, forms, reports, web access, and interface design.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 120 Introduction to Programming with Python 3(3-0)
Fall.
This course introduces students to the basic concepts in programming through the Python language. Throughout the course there are multiple opportunities for students to practice the programming and debugging process.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

CIS 150 Introduction to Computer Information Systems 3(3-0)
Fall, Spring.
An examination of the information systems industry. Topics covered include technologies, tools, processes, systems, and careers. Also includes discussion of relevant societal and ethical issues.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 171 Introduction to Java Programming 4(3-2)
Fall, Spring, Summer.
An introduction to secure computer programming, design, and testing using the Java object-oriented programming language. Topics include language constructs, functions, file handling, and inheritance.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 185 PC Architecture 3(2-1)
Fall, Spring.
In depth study of personal computer hardware, peripherals, and interfaces. Course examines processors, disk drives, buses, video cards, memory and diagnostic software.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 210 Introduction to Cyber Security 3(2-2)
Spring.
CIS210 is an introductory and overview course for the principles and application of cyber security concepts and techniques. This course will analyze both the technical and non-technical fundamentals of cyber security.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 240 Systems Analysis & Design 3(3-0)
Fall.
Practical methods for analyzing business problems and designing contemporary secure information systems solutions using various methodologies, techniques, skills, and tools.
Prerequisite: CIS 171.
Corequisite: None.
Registration Information: None.

CIS 250 Introduction to Business Analytics 3(3-0)
Fall, Spring, Summer.
An introduction to the processes needed to formulate and solve business problems and to support managerial decision making using MS Excel Spreadsheets and Excel add-ins.
Prerequisite: None.
Corequisite: None.
Registration Information: MS Word, Excel and PowerPoint Competency.

CIS 271 Advanced Program Design with Java 4(3-2)
Spring.
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.
Corequisite: None.
Registration Information: None.

CIS 289 Network Concepts 3(2-2)
Fall.
Fundamental hardware, software, data communication, and cyber security concepts necessary for designing and securing computer networks and computing environments.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 290 Special Projects (1-5 V)
As Needed.
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: None.
Corequisite: None.
Registration Information: Sophomore standing. Permission of instructor. Repeatable (3).

CIS 291 Special Topics (1-5 V)
As Needed.
Study of new and emerging topics and technologies in the computing field.
Prerequisite: None.
Corequisite: None.
Registration Information: Sophomore standing. Repeatable (3).

CIS 298 Internship (1-5 V)
As Needed.
IT-related industrial work experience under the direction of a field supervisor and faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

CIS 311 Introduction to Web Development 3(3-0)
Fall.
This course provides hands-on experience in designing and securing Web-based applications. It applies the latest web technologies to create, debug and publish secure web applications.
Prerequisite: CIS 171.
Corequisite: None.
Registration Information: None.

CIS 315 Linux Fundamentals 3(3-0)
Fall.
Explore Linux features, including shell commands and shell scripts, file system and directory structures, text editors, processes, regular expression, and other system administration topic such as file ownership and permissions.
Prerequisite: CIS 171.
Corequisite: None.
Registration Information: None.

CIS 350 Database Management 3(3-0)
Fall.
Design, implementation and use of database 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.
Corequisite: None.
Registration Information: Permission of instructor.

CIS 359 Advanced Programming with C# 3(3-0)
Spring.
Design and develop desktop and web-based applications using C# and .NET. Emphasis on advanced programming concepts and technique, and secure coding practices.
Prerequisite: CIS 171.
Corequisite: None.
Registration Information: None.

CIS 365 Management Information Systems 3(3-0)
As Needed.
Introduction to application and management of IT in functional business areas (marketing, finance, accounting, etc.). Topics include IT strategy, business intelligence, e-commerce, and cyber security.
Prerequisite: CIS 103 and CIS 104 and MGMT 201.
Corequisite: None.
Registration Information: Open to non-CIS majors only.

CIS 383 E-Commerce 3(3-0)
As Needed.
This course focuses on key issues including e-commerce strategy, business models, technology infrastructure, security and payment systems, e-marketing, and ethical behavior.
Prerequisite: MGMT 201.
Corequisite: None.
Registration Information: Junior standing.

CIS 386 Android Application Development (3 V)
Fall.
Secure development of Android applications using advanced Java programming concepts for the Android devices.
Prerequisite: CIS 271.
Corequisite: None.
Registration Information: None.

CIS 401 Network Systems Administration 3(2-2)
Spring.
Introduces the necessary knowledge and skills to install, configure, manage, and secure network operating systems, preparing students to be system administrators in a networking environment.
Prerequisite: CIS 289.
Corequisite: None.
Registration Information: None.

CIS 410 Data Analytics with Python 3(3-0)
Fall.
Using Python programming language as a tool to solve the problems in Data Analytics such as data visualization, natural language processing, database handling, and machine learning.
Prerequisite: CIS 171.
Corequisite: None.
Registration Information: None.

CIS 411 Internet Server-Side Programming (3 V)
Spring.
Secure 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 and CIS 350.
Corequisite: None.
Registration Information: None.

CIS 432 Senior Professional Project 6(3-6)
Spring.
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: MGMT 368.
Corequisite: None.
Registration Information: Must have completed CIS core.

CIS 450 Advanced Data Analytics 3(3-0)
Spring.
Emphasis on cutting-edge applications, tools, techniques, and trends in Data Analytics such as data visualization, interactive dashboard, Artificial Intelligence, Machine Learning, and Big Data architecture.
Prerequisite: CIS 350.
Corequisite: None.
Registration Information: Permission of instructor.

CIS 460 Cyber Security & Defense (3 V)
Spring.
Students will understand the impact of cyber threats to critical IT resources. Topics include defense-in-depth safeguards, threat vulnerability asset analysis, and secure programming.
Prerequisite: CIS 289.
Corequisite: None.
Registration Information: None.

CIS 461 IT Security Risk Management 3(3-0)
Fall.
Overview of cyber security threats to operations, hardware, software, assessment of cyber security risk, risk mitigation strategies, disaster recovery planning, and cyber security law.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 462 Computer Forensics 3(2-2)
Fall.
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.
Corequisite: None.
Registration Information: None.

CIS 470 Virtualization & Cloud Technologies 3(2-2)
Spring.
This course provides students with the knowledge and skills to install and configure various cloud and virtualization technologies. Course topics include hardware virtualization, OS virtualization, and cloud platforms.
Prerequisites: CIS 315.
Corequisites: None.
Registration Information: None.

CIS 490 Special Projects (1-5 V)
As Needed.
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: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

CIS 491 Special Topics 1-5(1-5-1-5)
As Needed.
Study of new and emerging topics and technologies in the computing field.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing. Repeatable (9).

CIS 493 Senior Seminar 1(1-0)
Fall.
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: None.
Corequisite: CIS 432.
Registration Information: Must have completed CIS core.

CIS 498 Internship (1-6 V)
As Needed.
IT-related industrial work experience under the direction of a field supervisor and faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior Standing. Repeatable (6).

CIS 510 Data Analytics with Python 3(3-0)
As Needed.
Using Python programming language as a tool to solve the problems in Data Analytics such as data visualization, natural language processing, database handling, and machine learning.
Prerequisite: CIS 171.
Corequisite: None.
Registration Information: Permission of instructor.

CIS 532 Professional Project 6(3-6)
As Needed.
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: MGMT 368.
Corequisite: None.
Registration Information: Must have completed CIS core.

CIS 550 Advanced Data Analytics 3(3-0)
Spring.
Emphasis on cutting-edge applications, tools, techniques, and trends in Data Analytics such as data visualization, interactive dashboard, Artificial Intelligence, Machine Learning, and Big Data architecture.
Prerequisite: CIS 240 or CIS 350.
Corequisite: None.
Registration Information: Permission of instructor.

CIS 560 Cyber Security & Defense (3 V)
Spring.
Students will understand the impact of cyber threats to critical IT resources. Topics include defense-in-depth safeguards, threat vulnerability asset analysis, and secure programming.
Prerequisite: CIS 289 or permission of instructor.
Corequisite: None.
Registration Information: Permission of instructor.

CIS 561 IT Security Management 3(3-0)
Spring.
Overview of cyber security threats to operations, hardware, software; assessment of cyber security risk, risk mitigation strategies, disaster recovery planning, cyber security law.
Prerequisite: Any Introduction to Management course.
Corequisite: None.
Registration Information: Introduction to MGMT course strongly recommended as prerequisite.

CIS 562 Computer Forensics 3(2-2)
Fall.
Students will learn computer forensics, business continuity planning, incident response, 3rd party contractual agreements with response agencies, Case Law and detection, and isolation response to info security.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

CIS 565 Management Information Systems 3(3-0)
Fall, Spring.
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: CIS 100 and CIS 103 and CIS 104 and MGMT 201.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

CIS 583 E-Commerce 3(3-0)
As Needed.
This course focuses on key issues including e-commerce strategy, business models, technology infrastructure, security and payment systems, e-marketing, and ethical behavior.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

CIS 591 Special Topics (1-5 V)
As Needed.
Study of new and emerging topics and technologies in the computing field.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

Economics (ECON)

ECON 101 Economics for Non-Business Majors 3(3-0)
As Needed.
ECON 101 is an online survey course covering both microeconomics and macroeconomics for Non-business major undergraduates. Topics will be studied through the lens of consumers, employees, business owners, and managers.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECON 201 Principles of Macroeconomics (GT-SS1) 3(3-0)
Fall, Spring.
Applications oriented approach to understanding the economy including monetary policy, deficits and surpluses, international issues; fundamental differences between liberal and conservative economic policies.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: SS, GT-SS1)

ECON 202 Principles of Microeconomics (GT-SS1) 3(3-0)
Fall, Spring, Summer.
Illustrates how firms make price, wage and profit maximizing decisions. Other topics include market performance, market failure, environmental issues and government intervention.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: SS, GT-SS1)

ECON 291 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECON 301 Intermediate Macroeconomics 3(3-0)
Fall.
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.
Corequisite: None.
Registration Information: None.

ECON 302 Intermediate Microeconomics 3(3-0)
Spring.
In-depth study of microeconomic theories of production and consumption. Emphasis on strategic behavior and decision making under uncertain conditions.
Prerequisite: ECON 202.
Corequisite: None.
Registration Information: None.

ECON 308 Economics For Managers 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

ECON 310 Money and Banking 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

ECON 320 Geography of the World Economy 3(3-0)
As Needed.
Students explore geographic dimensions of economic activities to better understand world regions, locational advantages, and geopolitical dynamics in an increasingly interconnected global economy.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECON 325 Real Estate Economics 3(3-0)
Fall.
Explore the role of Real Estate in the U.S. economy. Examine the economic factors in the market, including property valuation, investment analysis methods, mortgage lending & investment strategies for wealth accumulation.
Prerequisite: ECON 201 and ECON 202.
Corequisite: None.
Registration Information: None.

ECON 420 Regional Economic Analysis 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

ECON 475 International Economics 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

ECON 490 Special Projects (1-6 V)
As Needed.
Special Projects.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

ECON 491 Special Topics (1-3 V)
As Needed.
Special Projects.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

ECON 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Must be HSB major. Permission of department chair. Repeatable (6).

ECON 498 Internship (1-6 V)
As Needed.
Supervised field work in selected business, social, and governmental organizations; supplemented by written reports.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Must be HSB major. Permission of internship coordinator. Repeatable (6).

ECON 501 Fundamentals of Economics 1.5(1.5-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

ECON 505 Principles of Microeconomics 3(3-0)
As Needed.
Applications oriented approach to understanding the economy including monetary policy, deficits and surpluses, international issues; fundamental differences between liberal and conservative economic policies.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

ECON 510 Economics for Managers 3(3-0)
Spring, Summer.
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: ECON 202.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

ECON 591 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director. Repeatable (6).

ECON 595 Independent Study (1-3 V)
As Needed.
Individual study of a subject determined by the instructor and student with permission of the director.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director. Repeatable (6).

Finance (FIN)

FIN 291 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

FIN 330 Principles of Finance 3(3-0)
Fall, Spring.
Principles of finance involved in problems confronting business organizations.
Prerequisite: ACCT 201; ECON 201 and ECON 202; BSAD 265 or MATH 156.
Corequisite: None.
Registration Information: None.

FIN 331 Managerial Finance: Policy, Planning and Control 3(3-0)
As Needed.
Financial management, planning, policy formulation and financial decision making.
Prerequisite: FIN 330.
Corequisite: None.
Registration Information: None.

FIN 333 Investment Analysis 3(3-0)
As Needed.
Analysis and forecasting of security markets, industry and company studies, portfolio selection and management.
Prerequisite: FIN 330.
Corequisite: None.
Registration Information: None.

FIN 430 Financial Institution and Markets 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

FIN 431 Financial Policy Analysis 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

FIN 470 Entrepreneurial Finance 3(3-0)
As Needed.
This course focuses on how to apply financial tools and techniques to the planning, funding, operation, and valuation of an entrepreneurial venture.
Prerequisite: FIN 330.
Corequisite: None.
Registration Information: None.

FIN 475 International Finance 3(3-0)
As Needed.
Illustrate theories and the current issues of international finance. Topics include the determination of exchange rates, intervention and international monetary systems.
Prerequisite: FIN 330.
Corequisite: None.
Registration Information: None.

FIN 490 Special Projects (1-6 V)
As Needed.
Special Projects.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

FIN 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

FIN 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: FIN 330.
Corequisite: None.
Registration Information: Permission of department chair. Repeatable (6).

FIN 498 Internship (1-6 V)
As Needed.
Supervised field work in selected business, social and governmental organizations; supplemented by written reports.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing. Repeatable (6).

FIN 501 Fundamentals of Finance 1.5(1.5-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

FIN 505 Principles of Finance 3(3-0)
As Needed.
Principles of finance involved in problems confronting business organizations.
Prerequisite: ACCT 505 or ECON 505.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

FIN 530 Financial Management 3(3-0)
Fall, Summer.
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: FIN 330.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

FIN 575 International Financial Management 3(3-0)
As Needed.
Financial theory and practice as applied to the financial management of multinational corporations.
Prerequisite: FIN 530.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

FIN 591 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.
Repeatable (6).

FIN 595 Independent Study (1-3 V)
As Needed.
Individual study of a subject determined by the instructor and student with permission of the director.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.
Repeatable (6).

Management (MGMT)

MGMT 201 Principles of Management 3(3-0)
Fall, Spring, Summer.
Managerial process of planning, organizing, leading, decision-making, and controlling. Modern management techniques will be emphasized.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MGMT 214 Introduction to Entrepreneurial Concepts 3(3-0)
As Needed.
Introduction and exploration of entrepreneurship. Students will identify and articulate start up ideas in project activities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MGMT 224 Intro Agribusiness Entrepreneurship 3(3-0)
As Needed.
Introductory exposure to entrepreneurship for agribusinesses through presentations by industry professionals.
Prerequisite: ECON 202.
Corequisite: None.
Registration Information: None.

MGMT 291 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MGMT 301 Organizational Behavior 3(3-0)
Fall, Spring, Summer.
Team-work, individual and group behavior, motivation, work design, communication, decision-making, leadership, and organizational culture.
Prerequisite: MGMT 201.
Corequisite: None.
Registration Information: None.

MGMT 305 Agri and Res Enterprise Analysis 3(3-0)
As Needed.
Use of records in agricultural and resource enterprise management; analytical methods, budgets, and planning techniques for improved decision making.
Prerequisite: CIS 100 and CIS 103 and CIS 104 and ECON 202.
Corequisite: None.
Registration Information: None.

MGMT 311 Operations and Quality Management 3(3-0)
As Needed.
Managerial perspective of the operations and quality functions, use of analytical tools to solve operations and quality problems.
Prerequisite: BSAD 265 or MATH 156.
Corequisite: None.
Registration Information: None.

MGMT 314 Socially Responsible & Sustainable Enterprises 3(3-0)
As Needed.
Investigation of social entrepreneurship and sustainability practices. Students will create organizational plans balancing human needs, ecology and economy to launch organizations capable of producing an abundant future.
Prerequisite: MGMT 214.
Corequisite: None.
Registration Information: Approval of instructor.

MGMT 318 Human Resource Management 3(3-0)
Fall, Spring.
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.
Corequisite: None.
Registration Information: None.

MGMT 342 Water Law, Policy, and Institutions 3(3-0)
As Needed.
Legal water issues within the context of historical, social and economic development with emphasis on the southwestern United States.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MGMT 362 Purchasing and Materials Management 3(3-0)
As Needed.
Strategies and tactical methods, opportunities and problems associated with the flow of materials in an organization will be covered.
Prerequisite: MGMT 311.
Corequisite: None.
Registration Information: None.

MGMT 368 Project Management 3(3-0)
Fall, Spring.
Project planning, control, management and evaluation. Use of project planning software.
Prerequisite: MGMT 201.
Corequisite: None.
Registration Information: Junior standing.

MGMT 375 Agricultural Law 3(3-0)
As Needed.
Laws, regulations, case decisions affecting ranching and farming in the Rocky Mountain area.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MGMT 408 Agricultural Finance 3(3-0)
As Needed.
Monetary affairs of agribusiness and agricultural production emphasizing credit institutions and procurement, investment, and management.
Prerequisite: AREC 305.
Corequisite: None.
Registration Information: None.

MGMT 410 Labor Management Relations 3(3-0)
As Needed.
Federal and state legislation and executive orders governing the employer-employee relationship; legal rights of organizations and collective bargaining.
Prerequisite: MGMT 318.
Corequisite: None.
Registration Information: None.

MGMT 414 Entrepreneurship 3(3-0)
As Needed.
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: MKTG 340.
Corequisite: None.
Registration Information: None.

MGMT 460 Operations Strategy 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

MGMT 468 Quality Management 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

MGMT 471 Organization Theory and Design 3(3-0)
As Needed.
Evaluation of organizational design structures, measurement of system performance, and problems in design of adaptive systems.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. HSB majors only. Permission of advisor.

MGMT 475 International Management 3(3-0)
Fall, Spring.
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: FIN 330 and MGMT 301 and MKTG 340.
Corequisite: None.
Registration Information: None.

MGMT 478 Agricultural Policy 3(3-0)
As Needed.
Formulation and administration of public policies affecting agricultural industries and rural areas in the United States.
Prerequisite: ECON 202.
Corequisite: None.
Registration Information: None.

MGMT 480 Leadership & Organizational Change 3(3-0)
As Needed.
Integrative course that draws upon the business and leadership cores to explore practical ways in which to identify, evaluate, plan, and lead opportunities for organizational change.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MGMT 485 Strategic Management 3(3-0)
Fall, Spring.
Integration of the business core disciplines to explore ways that strategy is formed in contemporary business organizations. Case method used extensively.
Prerequisite: BSAD 360 and FIN 330 and MGMT 301 and MGMT 311 and MKTG 340.
Corequisite: None.
Registration Information: None.

MGMT 488 Sports Industry Management 3(3-0)
Spring.
Development of the sports industry; present state, and future trends in the field through the lenses of recreation, amateur and professional sport.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: Repeatable (99).

MGMT 490 Special Projects (1-6 V)
As Needed.
Special Projects.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

MGMT 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MGMT 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Must be HSB major. Permission of department chair. Repeatable (6).

MGMT 498 Internship (1-6 V)
As Needed.
Supervised field work in selected business, social and governmental organizations; supplemented by written reports.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Must be HSB major. Permission of internship coordinator. Repeatable (6).

MGMT 501 Fundamentals of Management 3(3-0)
As Needed.
This class familiarizes students with the managerial process and multiple specific topics related to the managerial function.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 505 Principles of Management 3(3-0)
As Needed.
Managerial process of planning, organizing, leading, decision-making, and controlling. Modern management techniques will be emphasized.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 511 Production/Operations Management 3(3-0)
Fall, Spring.
Managerial perspective of operations functions, under-standing of analytical tools to solve operations problems, applied operations issues, and develop decision-making skills.
Prerequisite: BSAD 265 or MATH 156 and MGMT 201.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 520 Management of Organizational Behavior 3(3-0)
Fall.
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: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 521 Theories of Organizational Design 3(3-0)
As Needed.
Identification of external environments faced by organizations and theories of organizational design that enable organizations to operate more effectively within their respective environments.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 540 Managing Human Resources 3(3-0)
As Needed.
A survey course covering the major areas of the management of human behavior in work organizations. Consideration given to aspects of strategic human resource management.
Prerequisite: MGMT 201.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 555 Wealth Building Enterprises 3(3-0)
As Needed.
Review of relevant contemporary literature, personal success definition, lifetime objectives and strategies to achieve those objectives. Seminar style. Emphasis on entrepreneurship.
Prerequisite: MGMT 201.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 568 Advanced Project Management 3(3-0)
As Needed.
This course focuses on advanced techniques, tools, and methods that organizations use to understand and successfully intervene in complex, systemic issues impacting an organization's ability to bring projects to fulfillment.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA/MEM or permission of MBA/MEM Director.

MGMT 575 International Management 3(3-0)
Fall, Spring, Summer.
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: BSAD 502 and MGMT 520.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 580 Negotiations (3 V)
Spring.
The course explores the psychology of bargaining & negotiation, interpersonal/inter-group conflict & its resolution. The focus is on critical negotiation, multiparty negotiation, international & cross-cultural differences.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 585 Management Policy & Strategy 3(3-0)
Fall, Spring, Summer.
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: MGMT 201.
Corequisite: None.
Registration Information: Must have completed MBA core. Admission to MBA. Permission of MBA Director.

MGMT 591 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.
Repeatable (6).

MGMT 595 Independent Study (1-3 V)
As Needed.
Individual study of a subject determined by the instructor and student with permission of the director.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.
Repeatable (6).

Marketing (MKTG)

MKTG 201 Introduction to Marketing 3(3-0)
As Needed.
Survey of marketing. Topics include: what is marketing, the effects of environment on marketing, segmenting markets and targeting customers, forces that shape purchasing behavior, the importance of research in marketing.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MKTG 291 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MKTG 340 Principles of Marketing 3(3-0)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: None.

MKTG 341 Sales Force Management 3(3-0)
As Needed.
Managing a sales force including recruiting, selection, training, compensation, supervision, stimulation & sales planning. Computer simulation used to do forecasting, budgeting, territory allocation, sales analysis & control.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: None.

MKTG 342 Promotional Strategy 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

MKTG 345 Retail Management 3(3-0)
As Needed.
Issues in buying, maintaining inventory, displaying, designing store layouts, promoting, providing services and general merchandising of products for improving retail profitability.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: None.

MKTG 348 Consumer Behavior 3(3-0)
As Needed.
Survey of contributions of behavioral sciences to understanding and prediction of consumer behavior in the decision-making process.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: None.

MKTG 388 Sports Industry Marketing 3(3-0)
Fall.
Introduce the various aspects of sports marketing, concentrating on the basic principles of sales, sponsorship, fan development, promotion, advertising and merchandising.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: Repeatable (99).

MKTG 410 Social Media and E-Marketing 3(3-0)
As Needed.
Detailed consideration of social media platforms and electronic marketing strategies. Planning executing, and monitoring online campaigns executed. Electronic Marketing theory discussed.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: None.

MKTG 440 Marketing Research 3(3-0)
As Needed.
Fundamental techniques. Practical experience in research methodology: planning an investigation, questionnaires, sampling, interpretation of results, report preparation.
Prerequisite: BSAD 265 and MKTG 340.
Corequisite: None.
Registration Information: None.

MKTG 441 Marketing Strategies 3(3-0)
As Needed.
Detailed consideration of process of formulating and implementing strategies in marketing. Major emphasis on markets, channels of distribution, and product analysis.
Prerequisite: BSAD 360 and MKTG 340.
Corequisite: None.
Registration Information: None.

MKTG 475 International Marketing 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

MKTG 490 Special Projects (1-6 V)
As Needed.
Special Projects.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MKTG 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MKTG 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MKTG 498 Internship (1-6 V)
As Needed.
Supervised field work in selected business, social and governmental organizations; supplemented by written reports.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: Junior or senior standing. Must be HSB major. Permission of internship coordinator. Repeatable (6).

MKTG 501 Fundamentals of Marketing 1.5(1.5-0)
As Needed.
This class prepares students in the conception, promotion, pricing and distribution of ideas, goods, and services from a marketing perspective.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MKTG 505 Principles of Marketing 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MKTG 540 Marketing Management 3(3-0)
Fall, Spring, Summer.
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: MKTG 340.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MKTG 561 Advertising & Promotion Research 3(3-0)
As Needed.
Advertising and Promotion research examines the effectiveness of alternative creative and channel strategies.
Prerequisite: MKTG 340.
Corequisite: MKTG 540.
Registration Information: Admission to MBA. Permission of MBA Director.

MKTG 575 International Marketing 3(3-0)
As Needed.
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 340.
Corequisite: MKTG 540.
Registration Information: Admission to MBA. Permission of MBA Director.

MKTG 591 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.
Repeatable (6).

MKTG 595 Independent Study (1-3 V)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.
Repeatable (6).

Accounting, Bachelor of Science in Business Administration

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.

Specific Admission Requirements

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. The Hasan School of Business prerequisite course requirement is a D, so that a student may progress to the next course. All business majors are required to earn a C or better in Business Core courses and in 300/400-level major courses to fulfill degree requirements. In addition, students must have completed the 100/200-level Business Core courses prior to enrolling in 300/400-level business courses. Additional prerequisites for Business Core courses and major courses are specified in the *Course Descriptions* section of the catalog. Business Core courses are listed alphabetically by prefix. Academic Planning Sheets are available in HSB.

Independent Studies, Directed Studies, Internships, and Special Projects will not be substituted for core or required courses. They may count as electives.

Majors & Concentration Areas

(Specific course requirements are detailed later.)

Select one:

- Accounting: 24
- Business Management: 24
- Business Management/Agribusiness: 27
- Business Management/Information Technology: 37
- Business Management/Marketing: 24
- Business Management/Sports Industry Management: 39
- Business Management/Org. Risk and Security Mgmt: 39
- Economics: 24
- Economics/Finance: 24

Business majors may take a second major in a business discipline that is **not related** to their first major discipline, provided that the additional 300/400-level credits associated with the second major are in addition to the credits needed to complete the first major (i.e., If the first major is 120 credits and the second major is 24 credits, then the total credits to complete the first major and the second major will be a minimum of 144). For example, a student earning the BSBA in business management could also major in accounting or economics.

Business majors may take a minor in a business discipline that is **not related** to their major discipline, provided that the additional 300/400-level credits associated with the minor are in addition to the credits needed to complete their major (i.e., If the major is 120 credits and the additional credits in the minor are 9 credits, then the total credits to complete the major and the minor will be a minimum of 129). For

example, a student earning the BSBA in business management could also minor in accounting or economics.

Outcomes Assessment Activities

Assurance of Learning

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

- **The Educational Testing Service (ETS) Major Field Test in Business.** This test, administered nationwide, assesses what students have learned in courses common to all business majors. Results are compared with those of other business students enrolled at selected peer institutions, as well as nationally. In the Hasan School of Business, the Major Field Test is given to students in the BSAD 493 Senior Seminar (1 c.h.) 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.

Specific Program Requirements

Specific Core Requirements

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
BSAD 101	Business-Careers and Opportunities	1
BSAD 265	Inferential Statistics & Problem Solving	3
BSAD 270	Business Communications	3
BSAD 302	Ethics in Business	3
BSAD 360	Advanced Business Statistics	3
BSAD 493	Senior Seminar	1
CIS 250	Introduction to Business Analytics	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	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 Credits		**51**

Specific Concentration Requirements

Course	Title	Credits
ACCT 301	Intermediate Accounting I	3
ACCT 302	Intermediate Accounting II	3
ACCT 311	Federal Income Tax	3
ACCT 320	Cost Accounting	3
ACCT 330	Accounting Information Systems	3
ACCT 401	Advanced Financial Accounting	3
ACCT 404	CPA Law	3
ACCT 410	Auditing	3
Total Credits		**24**

Specific Graduation Requirements

(Accounting, Business Management, & 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. The Hasan School of Business prerequisite course requirement is a D, so that a student may progress to the next course. All business majors are required to earn a C or better in Business Core courses and 300/400-level major courses to fulfill degree requirements.

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. "In residence" courses will include Business or CIS courses offered through CSU Pueblo Extended Studies Programs. Students who complete junior- and senior-level courses at other colleges or universities with grades of C- or better, and wish to apply the credits earned toward their degree, must request approval through the Dean or Faculty Chair. Courses taken without such approval will not be counted toward the fulfillment of degree requirements.

Only the Dean or the Faculty Chair may waive any portion of these requirements and only upon written petition by a student who has demonstrated extraordinary ability.

Transfer Students

Undergraduate transfer work from other institutions is evaluated first by the Registrar's Office, but final degree determination is made by the Hasan School of Business. The School of Business reserves the right to disallow any credit that is not appropriate degree credit as determined by the School.

Summary of Graduation Requirements

(Accounting, Business Management, & Economics)

General Education: 35[1]
Business Core: 45[1]
Major: 24-39
Open Electives: 0-16

TOTAL (minimum credits): 120

[1] ECON 201 Principles of Macroeconomics (GT-SS1) (3 c.h.) and ECON 202 Principles of Microeconomics (GT-SS1) (3 c.h.) are counted in General Education.

Accounting, Minor

Specific Program Requirements

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ACCT 301	Intermediate Accounting I	3
ACCT 320	Cost Accounting	3
ACCT 3/400	Elective	3
ECON 202	Principles of Microeconomics (GT-SS1)	3
MGMT 201	Principles of Management	3
Total Credits		**21**

A GPA of 2.000 or higher is required for the minor.

Business Administration 3+2 Program, Integrated Bachelor of Science/Master of Business Administration

Specific 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 Principles of Management (3 c.h.), FIN 330 Principles of Finance (3 c.h.), and MKTG 340 Principles of Marketing (3 c.h.). Students must have a minimum GPA of 3.5 and a GMAT of at least 450 (i.e., an index of 1150) to be admitted to the program. Students may also take the GRE and must receive a minimum of 152 on the Verbal Reasoning and a 152 on the Quantitative Reasoning to be admitted to the program.

Options to satisfy GMAT requirement:

All MBA students are required to either take the Graduate Management Admissions Test (GMAT) or qualify to waive the GMAT requirement based on the options provided in the following sections.

Option I: Complete the GMAT with a minimum score of 400 and satisfy the qualification score of 1,150 calculated as 200 * Undergraduate cumulative GPA + GMAT score.

Option II: Take the GRE with a minimum GMAT score equivalent of 400 and a minimum undergraduate GPA of 3.0.

GMAT equivalent Score calculated as [-2080.75 + (GRE Verbal * 6.38) + (GRE Quant * 10.62)] must be at least 400.

Admissions Index Score calculated as GMAT equivalent score + 200 * Undergraduate cumulative GPA, must be equal to or greater than 1,150.

Option III: If you have earned a graduate degree (equivalent to a U.S. Master's or PhD) from a regionally accredited institution with cumulative GPA of 3.0 higher.

If your degree is from outside of the U.S., you will have to provide an official evaluation from any approved evaluation company that proves your master's is equivalent to a U.S. master's degree from a regionally accredited institution.

OR

Current admission and enrollment in a graduate dual-degree program at select partner institutions, currently including MBA admission at Chungnam National University, Korea.

Option IV: Five (5) or more years of full-time substantive mid-level managerial work experience and/or military service with increasing levels of responsibility AND an undergraduate cumulative GPA of 3.0 or higher.

Option V: Ten (10) or more years of full-time substantive mid-level managerial work experience and/or military service with increasing levels of responsibility AND an undergraduate GPA of 2.75 or higher.

All petitioners will need to provide one letter of reference from a supervisor who can verify your work experience and increasing scope of responsibility.

GMAT writing score must be 4.5 or higher to waive BSAD 592 Research (1-6 c.h.). GRE writing score must be a minimum of 3.5 to waive BSAD 592 Research (1-6 c.h.).

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 or GRE.

NOTE: Students are strongly encouraged to complete an internship prior to enrolling in graduate-level courses.

Specific Program Requirements

Students in the integrated BSBA/MBA program must complete:

- The Undergraduate Business Core (excluding BSAD 302 Ethics in Business (3 c.h.), MGMT 301 Organizational Behavior (3 c.h.), MGMT 311 Operations and Quality Management (3 c.h.), and MGMT 485 Strategic Management (3 c.h.));
- BSAD 493 Senior Seminar (1 c.h.); and
- A major within the Hasan School of Business
- All remaining specified MBA courses

In addition, students must satisfy all GPA requirements for the BSBA.

The integrated BSBA/MBA program has the following requirements:

Course	Title	Credits
General Education		30
Business Core		51
Major Requirements		27-39
MBA Requirements		36
Total Credits		**144-156**

Undergraduate Requirements [1]

Specific Core Requirements

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3

BSAD 101	Business-Careers and Opportunities	1
BSAD 265	Inferential Statistics & Problem Solving	3
BSAD 270	Business Communications	3
BSAD 302	Ethics in Business	3
BSAD 360	Advanced Business Statistics	3
BSAD 493	Senior Seminar	1
CIS 250	Introduction to Business Analytics	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	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 Credits		**51**

[1] Independent Studies, Directed Studies, Internships, and Special Projects will not be substituted for core or required courses. They may count only as electives.

Graduate Requirements

Specific Core Requirements

Course	Title	Credits
ACCT 510	Managerial Accounting	3
BSAD 502	Business Ethics and Environment	3
BSAD 575	International Business	3
CIS 565	Management Information Systems	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 MBA courses must be completed:		**6**
Approved Graduate Electives		
Total Credits		**36**

Business Administration 3+2 Program, Integrated Computer Information Systems, Bachelor of Science/Master of Business Administration

Specific 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 Principles of Management (3 c.h.), FIN 330 Principles of Finance (3 c.h.), and MKTG 340 Principles of Marketing (3 c.h.). Students must have a minimum GPA of 3.5 and a GMAT of at least 450 (i.e., an index of 1150) to be admitted to the program. Students may also take the GRE and must receive a minimum of 152 on the Verbal Reasoning and a 152 on the Quantitative Reasoning to be admitted to the program.

Options to satisfy GMAT requirement:

All MBA students are required to either take the Graduate Management Admissions Test (GMAT) or qualify to waive the GMAT requirement based on the options provided in the following sections.

Option I: Complete the GMAT with a minimum score of 400 and satisfy the qualification score of 1,150 calculated as 200 * Undergraduate cumulative GPA + GMAT score.

Option II: Take the GRE with a minimum GMAT score equivalent of 400 and a minimum undergraduate GPA of 3.0.

GMAT equivalent Score calculated as [-2080.75 + (GRE Verbal * 6.38) + (GRE Quant * 10.62)] must be at least 400.

Admissions Index Score calculated as GMAT equivalent score + 200 * Undergraduate cumulative GPA, must be equal to or greater than 1,150.

Option III: If you have earned a graduate degree (equivalent to a U.S. Master's or PhD) from a regionally accredited institution with cumulative GPA of 3.0 higher.

If your degree is from outside of the U.S., you will have to provide an official evaluation from any approved evaluation company that proves your master's is equivalent to a U.S. master's degree from a regionally accredited institution.

OR

Current admission and enrollment in a graduate dual-degree program at select partner institutions, currently including MBA admission at Chungnam National University, Korea.

Option IV: Five (5) or more years of full-time substantive mid-level managerial work experience and/or military service with increasing levels of responsibility AND an undergraduate cumulative GPA of 3.0 or higher.

Option V: Ten (10) or more years of full-time substantive mid-level managerial work experience and/or military service with increasing levels of responsibility AND an undergraduate GPA of 2.75 or higher.

All petitioners will need to provide one letter of reference from a supervisor who can verify your work experience and increasing scope of responsibility.

GMAT writing score must be 4.5 or higher to waive BSAD 592 Research (1-6 c.h.). GRE writing score must be a minimum of 3.5 to waive BSAD 592 Research (1-6 c.h.).

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.

Specific Program Requirements

Students in the integrated BS-CIS/MBA program must complete:

- The CIS required and required-related courses excluding CIS 350 Database Management (3 c.h.) and CIS 432 Senior Professional Project (6 c.h.);
- ACCT 201 Principles of Financial Accounting (3 c.h.), ECON 202 Principles of Microeconomics (GT-SS1) (3 c.h.), FIN 330 Principles of Finance (3 c.h.) and MKTG 340 Principles of Marketing (3 c.h.);
- 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.

Special Projects and Internships will not be substituted for required CIS major courses. Independent Studies will not be substituted for required MBA courses.

The Integrated BS-CIS/MBA degree plan has the following requirements:

Course	Title	Credits
General Education		36
BS Computer Information Systems		72
MBA Requirements		36
Total Credits		**144**

Undergraduate Requirements

Course	Title	Credits
Quantitative Analysis Requirement		**10**
BSAD 265	Inferential Statistics & Problem Solving	3
BSAD 360	Advanced Business Statistics	3
MATH 220	Quantitative Analysis for Business	4
Required Related Courses		**9**
BSAD 270	Business Communications	3
MGMT 201	Principles of Management	3
MGMT 368	Project Management	3
CIS Major Courses		**53**
CIS 105	Introduction to Access DBMS	1
CIS 150	Introduction to Computer Information Systems	3
CIS 171	Introduction to Java Programming	4
CIS 210	Introduction to Cyber Security	3
CIS 240	Systems Analysis & Design	3
CIS 250	Introduction to Business Analytics	3
CIS 271	Advanced Program Design with Java	4
CIS 289	Network Concepts	3
CIS 311	Introduction to Web Development	3
CIS 315	Linux Fundamentals	3
CIS 493	Senior Seminar	1
Total Credits		**72**

Graduate Requirements

Course	Title	Credits
Required Courses		
ACCT 510	Managerial Accounting	3
BSAD 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
Required CIS Courses		
CIS 532	Professional Project	6
CIS 550	Advanced Data Analytics	3
Take one of the following:		3
CIS 510	Data Analytics with Python	3
CIS 560	CYBER SECURITY & DEFENSE	3
CIS 561	IT SECURITY MANAGEMENT	3
CIS 562	Computer Forensics	3
Total Credits		**36**

Business Administration 3+2 Program, Integrated Construction Management, Bachelor of Science/ Master of Business Administration

Specific Admission Requirements

The BS-CM/MBA program is unique. It allows qualified students to earn both a BS degree in Construction Management 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 Principles of Management (3 c.h.), FIN 330 Principles of Finance (3 c.h.), and MKTG 340 Principles of Marketing (3 c.h.). Students must have a minimum GPA of 3.5 and a GMAT of at least 450 (i.e., an index of 1150) to be admitted to the program. Students may also take the GRE and receive a 152 on the Verbal Reasoning and a 152 on the Quantitative Reasoning to be admitted to the program.

Options to satisfy GMAT requirement:

All MBA students are required to either take the Graduate Management Admissions Test (GMAT) or qualify to waive the GMAT requirement based on the options provided in the following sections.

Option I: Complete the GMAT with a minimum score of 400 and satisfy the qualification score of 1,150 calculated as 200 * Undergraduate cumulative GPA + GMAT score.

Option II: Take the GRE with a minimum GMAT score equivalent of 400 and a minimum undergraduate GPA of 3.0.

GMAT equivalent Score calculated as [-2080.75 + (GRE Verbal * 6.38) + (GRE Quant * 10.62)] must be at least 400.

Admissions Index Score calculated as GMAT equivalent score + 200 * Undergraduate cumulative GPA, must be equal to or greater than 1,150.

Option III: If you have earned a graduate degree (equivalent to a U.S. Master's or PhD) from a regionally accredited institution with cumulative GPA of 3.0 higher.

If your degree is from outside of the U.S., you will have to provide an official evaluation from any approved evaluation company that proves your master's is equivalent to a U.S. master's degree from a regionally accredited institution.

OR

Current admission and enrollment in a graduate dual-degree program at select partner institutions, currently including MBA admission at Chungnam National University, Korea.

Option IV: Five (5) or more years of full-time substantive mid-level managerial work experience and/or military service with increasing levels of responsibility AND an undergraduate cumulative GPA of 3.0 or higher.

Option V: Ten (10) or more years of full-time substantive mid-level managerial work experience and/or military service with increasing levels of responsibility AND an undergraduate GPA of 2.75 or higher.

All petitioners will need to provide one letter of reference from a supervisor who can verify your work experience and increasing scope of responsibility.

GMAT writing score must be 4.5 or higher to waive BSAD 592. GRE writing score must be a minimum of 3.5 to waive BSAD 592.

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: CM Students are strongly encouraged to establish an academic advisor in both in Construction Management and Business Administration as early as possible in the process to ensure efficient academic planning. Students are also strongly encouraged to complete an internship prior to enrolling in graduate-level courses.

Specific Program Requirements

Students in the integrated BS-CM/MBA program must complete:

- ACCT 201 Principles of Financial Accounting (3 c.h.), ECON 202 Principles of Microeconomics (GT-SS1) (3 c.h.), FIN 330 Principles of Finance (3 c.h.) and MKTG 340 Principles of Marketing (3 c.h.);
- The CM Required Course Core (excluding BSAD 302 Ethics in Business (3 c.h.), replaced by BSAD 502 Business Ethics and Environment (3 c.h.))
- The CM major within the College of Science, Technology, Engineering, and Mathematics and;
- All remaining specified MBA courses.

In order to minimize additional credits being required BSCM/MBA students must take the graduate courses MGMT 520 Management of Organizational Behavior (3 c.h.), MGMT 511 Production/Operations Management (3 c.h.), and MGMT 585 Management Policy & Strategy (3 c.h.) in place of the 9 credits of Technical and Management Electives. If CM majors take different undergraduate courses, they will still be required take the needed MBA courses to complete both degrees.

In addition, students must satisfy all GPA requirements for the BS in CM and the MBA (see the MBA listing under the *Graduate Studies* section of the catalog).

The joint BS-CM/MBA program has the following requirements:

Course	Title	Credits
General Education		32
BS Construction Management		82
MBA Requirements		36
Total Credits		**150**

Undergraduate Requirements

Course	Title	Credits
Introduction to Computers		**3**
CIS 100	Introduction to Word	1
CIS 103	Introduction to PowerPoint	1
CIS 104	Introduction to Excel Spreadsheets	1
Business & Management [1]		**21**
ACCT 201	Principles of Financial Accounting	3
BSAD 270	Business Communications	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	3
FIN 330	Principles of Finance	3
MKTG 340	Principles of Marketing	3
MGMT 201	Principles of Management	3
Construction Management		**58**
CET 102	Surveying I	3
CET 103	Surveying II	3
CET 115	Civil Drafting I	3
CET 207	Construction Materials and 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 Credits		**82**

[1] Special Projects and Internships will not be substituted for required CM major courses. Independent Studies will not be substituted for required MBA courses.

Graduate Requirements
Specific Core Requirements

Course	Title	Credits
ACCT 510	Managerial Accounting	3
BSAD 502	Business Ethics and Environment	3
BSAD 575	International Business	3
CIS 565	Management Information Systems	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 MBA courses must be completed:		**6**
Approved Graduate Electives		
Total Credits		**36**

Business Administration 3+2 Program, Non-Integrated BS, BA/MBA

The BS, BA/MBA program is unique. It allows qualified students to earn both a Bachelor's degree, and an MBA concurrently.

A student can use up to 12 credits of elective from his/her respective major for MBA courses once he/she has been admitted into the program.

A student who earns two "C" or lower 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.

Students who complete part of the integrated degree plan but decide to opt out of the MBA program and continue towards earning **only** the undergraduate degree can use the MBA courses toward the undergraduate degree but cannot later use them to pursue the MBA degree.

Specific Admission Requirements

Students from all disciplines would be eligible to participate in a non-integrated BS, BA/MBA opportunity. The requirements for admission are, the students must have completed 90 credits or more in their respective major, and have a cumulative GPA of 3.5 or higher. The students must also take the following required leveling courses:

- ACCT 201 Principles of Financial Accounting (3 c.h.), BSAD 265 Inferential Statistics & Problem Solving (3 c.h.) or MATH 156 Introduction to Statistics (GT-MA1) (3 c.h.), ECON 202 Principles of Microeconomics (GT-SS1) (3 c.h.), FIN 330 Principles of Finance (3 c.h.), MGMT 201 Principles of Management (3 c.h.) and MKTG 340 Principles of Marketing (3 c.h.) and the GPA of those courses must also have a 3.5 or higher before admission to graduate program.
- All students participating in this program will be required to take the GMAT and get a 450 or higher before being admitted into the program.

Specific Program Requirements

Students in the Non-Integrated BS,BA/MBA program must complete:

- The requirements for a Bachelor of Science or Bachelor of Arts degree
- The requirements for a Masters in Business Administration

Students may use up to 12 credits of elective coursework from their respective major to fulfill MBA courses once they have been admitted to the program.

The 3+2 degree plan has the following requirements:

Course	Title	Credits
General Education		60
BS or BA Requirements		48-60
MBA Requirements		36
Total Credits		**144-156**

Undergraduate Requirements

Students must complete all of the degree requirements of their respective major. Please see respective major for specific program requirements.

Graduate Requirements

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 36 credits which are taken by all MBA students.

MBA Core
Specific Core Requirements

Course	Title	Credits
ACCT 510	Managerial Accounting	3
BSAD 502	Business Ethics and Environment	3
BSAD 575	International Business	3
CIS 565	Management Information Systems	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 MBA courses must be completed:		**6**
Approved Graduate Electives		
Total Credits		**36**

Business Administration 3+2 Program, Non-Integrated BS,BA/MBA in Business Administration: Public Management Concentration

The BS,BA/MBA in Business Administration: Public Management Concentration program is unique. It allows qualified students to earn both a Bachelor's degree, and an MBA In Business Administration with a Public Management Concentration concurrently.

A student can use up to 12 credits of elective from his/her respective major for MBA courses once he/she has been admitted into the program.

A student who earns two "C" or lower 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.

Students who complete part of the integrated degree plan but decide to opt out of the MBA program and continue towards earning **only** the undergraduate degree can use the MBA courses toward the undergraduate degree but cannot later use them to pursue the MBA degree.

Specific Admission Requirements

Students from all disciplines would be eligible to participate in a non-integrated BS, BA/MBA in Business Administration: Public Management Concentration opportunity. The requirements for admission are, the students must have completed 90 credits or more in their respective major, and have a cumulative GPA of 3.5 or higher. The students must also take the following required leveling courses:

- ACCT 201 Principles of Financial Accounting (3 c.h.), BSAD 265 Inferential Statistics & Problem Solving (3 c.h.) or MATH 156 Introduction to Statistics (GT-MA1) (3 c.h.), ECON 202 Principles of Microeconomics (GT-SS1) (3 c.h.), FIN 330 Principles of Finance (3 c.h.), MGMT 201 Principles of Management (3 c.h.) and MKTG 340 Principles of Marketing (3 c.h.) and the GPA of those courses must also have a 3.5 or higher before admission to graduate program.
- All students participating in this program will be required to take the GMAT and get a 450 or higher before being admitted into the program.

Specific Program Requirements

Students in the Non-Integrated BS,BA/MBA: Public Management Concentration program must complete:

- The requirements for a Bachelor of Science or Bachelor of Arts degree
- The requirements for a Masters in Business Administration: Public Management Concentration

Students may use up to 12 credits of elective coursework from their respective major to fulfill MBA courses once they have been admitted to the program.

The 3+2 degree plan has the following requirements:

Course	Title	Credits
General Education		36
BS or BA Requirements		72-84
MBA Core & Public Management Concentration		36
Total Credits		**144-156**

Undergraduate Requirements

Students must complete all of the degree requirements of the respective major. Please see respective major for specific program requirements.

Graduate Requirements

Course	Title	Credits
ACCT 510	Managerial Accounting	3
BSAD 575	International Business	3
CIS 565	Management Information Systems	3
ECON 510	Economics for Managers	3
MGMT 511	Production/Operations Management	3
MGMT 585	Management Policy & Strategy	3
POLS 510	Public and Nonprofit Leadership	3
POLS 520	Public Budgeting & Financial Management	3
POLS 530	Essentials of Public and Nonprofit Management	3
POLS 540	The Public Policy Process	3
Select two of the following courses:		6
BSAD 502	Business Ethics and Environment	3
MGMT 520	Management of Organizational Behavior	3
MKTG 540	Marketing Management	3
Total Credits		**36**

Business Administration, Master of Business Administration

The goal of the MBA program is to prepare students for high-level general management careers in business and other organizations. Students acquire an understanding of management theory and application, the economic, political and social environment in which businesses function, and behavioral skills that are essential in the manager's role in the implementation of business decisions. The MBA program strives to provide an environment conducive to the development of each student's ability to think in a creative and effective manner. The program makes extensive use of lectures, seminars, group projects, and case studies that are designed to demonstrate the integrative, interdisciplinary nature of business decisions.

The program is open to all applicants with a bachelor's degree, regardless of the undergraduate field of study. Students without prior business course work will be required to take leveling courses in financial accounting, business statistics, microeconomics, finance, management, and marketing. Additionally, a review of GMAT writing sub score will be used to determine if there is a need for developmental work. Students who earn less than a "C" in any leveling course will be dismissed from the program. Generally, graduate students are required to complete all leveling course requirements before enrolling in the first 500-level courses. In some instances, a student will be permitted to enroll in 500-level courses while completing the final leveling courses.

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

Specific Admission Requirements

GMAT is optional. For applicants exercising the option to not take the GMAT, you MUST complete BSAD 510, Academic writing for MBA in your first semester.

Applicants opting to submit a GMAT or GRE score, your GMAT writing score must be 4.5 or higher to waive BSAD 510 Academic Writing for MBA Students (1 c.h.). GRE writing score must be a minimum of 3.5 to waive BSAD 510 Academic Writing for MBA Students (1 c.h.).

Learning Outcomes Assessment

The Hasan School of Business is committed to continuous improvement through a rigorous assessment program focused on measuring learning outcomes and implementing measures to enhance students' chances of success. Within each individual course, faculty members utilize a variety

of assessment techniques including student presentations, projects, peer evaluations, examinations, and student surveys.

Learning Goals for the MBA Program

The Hasan School of Business faculty works diligently to provide graduates with a high-quality education that prepares them for advancement in business. Our program prepares students through achievement of four primary learning goals.

1. Expression of Thoughts and Ideas
    - Our graduate students will be able to communicate effectively.
2. Decision Making and Problem Solving
    - Our graduate students will be able to analyze problems, identify relevant issues, and craft solutions.
3. Decision Making in a Global Business Environment
    - Our graduate students will be able to develop solutions for global business issues.
4. Ethical Analysis
    - Our graduate students will be able to evaluate ethical situations and offer appropriate recommendations.

Assurance of Learning

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

- **The Educational Testing Service (ETS) Major Field Test in Business**
    - This test, administered nationwide, assesses what students have learned primarily in courses common to all business majors. Results are compared with those of other business students enrolled at selected peer institutions, as well as nationally.
- **Course-Embedded Measures**
    - Exams, papers, presentations, and projects are course-embedded measures that can be used to assess student performance related to our MBA learning goals.

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

Specific Program Requirements

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

Independent Studies will not be substituted for core or required courses. They may count only as electives.

Specific Core Requirements

Course	Title	Credits
ACCT 510	Managerial Accounting	3
BSAD 502	Business Ethics and Environment	3
BSAD 575	International Business	3
CIS 565	Management Information Systems	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 MBA courses must be completed:		**6**
Approved Graduate Electives		
Total Credits		**36**

Additional Program Requirements

MBA Standards

A student who earns two "C" or lower 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.

Dual Degree MBA-Chungnam National University

Students enrolled as MBA students at Chungnam National University (CNU) in South Korea may enroll in a dual degree MBA at Colorado State University Pueblo.

ONLY admitted dual degree MBA students from CNU will be allowed to transfer 18 credits from CNU into the CSU Pueblo MBA program to complete 36 credit hour requirement. This policy supersedes the existing 9 credit rule. This exclusion will only apply to students from Chungnam who are admitted into the dual degree program.

Admission requirements for the Chungnam Dual Degree MBA Program will be the same as the admission requirements for all CSU Pueblo MBA students as listed in the catalog, beginning on Page 82.

Joint BSBA/MBA, BS-CIS/MBA, and BS-CM/MBA Programs

Specific requirements for the joint BSBA/MBA, BS-CIS/MBA and the BS-CM/MBA plans are included in the *Hasan School of Business* section of the catalog.

Business Administration, Minor

Specific Program Requirements

(Open to non-business majors only)

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	3
FIN 330	Principles of Finance	3
MGMT 201	Principles of Management	3
MKTG 340	Principles of Marketing	3
Total Credits		**21**

Business Administration: Cybersecurity Concentration, Master of Business Administration

Learning Outcomes Assessment

The Hasan School of Business is committed to continuous improvement through a rigorous assessment program focused on measuring learning outcomes and implementing measures to enhance students' chances of success. Within each individual course, faculty members utilize a variety of assessment techniques including student presentations, projects, peer evaluations, examinations, and student surveys.

Learning Goals for the MBA Program

The Hasan School of Business faculty works diligently to provide graduates with a high-quality education that prepares them for advancement in business. Our program prepares students through achievement of four primary learning goals.

1. Expression of Thoughts and Ideas
    - Our graduate students will be able to communicate effectively.
2. Decision Making and Problem Solving
    - Our graduate students will be able to analyze problems, identify relevant issues, and craft solutions.
3. Decision Making in a Global Business Environment
    - Our graduate students will be able to develop solutions for global business issues.
4. Ethical Analysis
    - Our graduate students will be able to evaluate ethical situations and offer appropriate recommendations.

Assurance of Learning

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

- **The Educational Testing Service (ETS) Major Field Test in Business**
    - This test, administered nationwide, assesses what students have learned primarily in courses common to all business majors. Results are compared with those of other business students enrolled at selected peer institutions, as well as nationally.
- **Course-Embedded Measures**
    - Exams, papers, presentations, and projects are course-embedded measures that can be used to assess student performance related to our MBA learning goals.

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

Specific Program Requirements

A student who earns two "C" or lower 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.

Course	Title	Credits
ACCT 510	Managerial Accounting	3
BSAD 575	International Business	3
CIS 560	CYBER SECURITY & DEFENSE	3
CIS 561	IT SECURITY MANAGEMENT	3
CIS 562	Computer Forensics	3
CIS 565	Management Information Systems	3
ECON 510	Economics for Managers	3
FIN 530	Financial Management	3
MGMT 511	Production/Operations Management	3
MGMT 585	Management Policy & Strategy	3
MKTG 540	Marketing Management	3
Choose one of the following:		3
CIS 550	Advanced Data Analytics	3
EN 513	Artificial Intelligence	3
CIS 510	Data Analytics with Python	3
Total Credits		**36**

Independent Studies will not be substituted for core or required courses. They may count only as electives.

Business Administration: Healthcare Administration Concentration, Master of Business Administration

Learning Outcomes Assessment

The Hasan School of Business is committed to continuous improvement through a rigorous assessment program focused on measuring learning outcomes and implementing measures to enhance students' chances of success. Within each individual course, faculty members utilize a variety of assessment techniques including student presentations, projects, peer evaluations, examinations, and student surveys.

Learning Goals for the MBA Program

The Hasan School of Business faculty works diligently to provide graduates with a high-quality education that prepares them for advancement in business. Our program prepares students through achievement of four primary learning goals.

1. Expression of Thoughts and Ideas
    - Our graduate students will be able to communicate effectively.
2. Decision Making and Problem Solving
    - Our graduate students will be able to analyze problems, identify relevant issues, and craft solutions.
3. Decision Making in a Global Business Environment
    - Our graduate students will be able to develop solutions for global business issues.
4. Ethical Analysis

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

Assurance of Learning

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

- **The Educational Testing Service (ETS) Major Field Test in Business**
  - This test, administered nationwide, assesses what students have learned primarily in courses common to all business majors. Results are compared with those of other business students enrolled at selected peer institutions, as well as nationally.
- **Course-Embedded Measures**
  - Exams, papers, presentations, and projects are course-embedded measures that can be used to assess student performance related to our MBA learning goals.

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

Specific Program Requirements

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:

Course	Title	Credits
ACCT 510	Managerial Accounting	3
CIS 565	Management Information Systems	3
ECON 510	Economics for Managers	3
FIN 530	Financial Management	3
MGMT 511	Production/Operations Management	3
MGMT 585	Management Policy & Strategy	3
NSG 505	Biostatistics & Research	3
NSG 548	Healthcare: Ethics, Law & Policy	3
NSG 716	Health Care Business & Finance	4
NSG 718	Organizational & Systems Leadership	4
BSAD 575	International Business	3
BSAD 510	Academic Writing for MBA Students	1
Total Credits		**36**

Additional Program Requirements

A student who earns two "C" or lower 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.

Independent Studies will not be substituted for core or required courses. They may count only as electives.

Business Administration: Public Management Concentration, Masters of Business Administration

Specific Program Requirements

Course	Title	Credits
ACCT 510	Managerial Accounting	3
BSAD 575	International Business	3
CIS 565	Management Information Systems	3
ECON 510	Economics for Managers	3
MGMT 511	Production/Operations Management	3
MGMT 585	Management Policy & Strategy	3
POLS 510	Public and Nonprofit Leadership	3
POLS 520	Public Budgeting & Financial Management	3
POLS 530	Essentials of Public and Nonprofit Management	3
POLS 540	The Public Policy Process	3
Select Two of the Following Courses		6
BSAD 502	Business Ethics and Environment	3
MGMT 520	Management of Organizational Behavior	3
MKTG 540	Marketing Management	3
Total Credits		**36**

Business Management, Bachelor of Science in Business Administration

The major in business management leads to the Bachelor of Science in Business Administration (BSBA) and provides students with the theoretical and conceptual basis of business as well as application skills to assume leadership roles in industry, government and education.

The undergraduate business management major permits students to select one area as an concentration. The knowledge and skills acquired with the major in business management can be used in a number of areas, such as human resource and operations management. The business management major with an agribusiness concentration prepares students for careers in the specialized agriculture/business sector. The business management major with an information technology concentration 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.

Specific Admission Requirements

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. The Hasan School of Business prerequisite course requirement is a D, so that a student may progress to the next course. All business majors are required to earn a C or better in Business Core courses and in 300/400-level major courses to fulfill degree requirements. In addition, students must have completed the 100/200-level Business Core courses prior to enrolling in 300/400-level business courses. Additional prerequisites for Business Core courses and major courses are specified in the *Course Descriptions* section of the catalog. Business Core courses are listed alphabetically by prefix. Academic Planning Sheets are available in HSB.

Independent Studies, Directed Studies, Internships, and Special Projects will not be substituted for core or required courses. They may count as electives.

Majors & Concentration Areas

(Specific course requirements are detailed later.)

Select one:

- Accounting: 24
- Business Management: 24
- Business Management/Agribusiness: 27
- Business Management/Information Technology: 37
- Business Management/Marketing: 24
- Business Management/Sports Industry Management: 39
- Business Management/Org. Risk and Security Mgmt: 39
- Economics: 24
- Economics/Finance: 24

Business majors may take a second major in a business discipline that is **not related** to their first major discipline, provided that the additional 300/400-level credits associated with the second major are in addition to the credits needed to complete the first major (i.e., If the first major is 120 credits and the second major is 24 credits, then the total credits to complete the first major and the second major will be a minimum of 144). For example, a student earning the BSBA in business management could also major in accounting or economics.

Business majors may take a minor in a business discipline that is **not related** to their major discipline, provided that the additional 300/400-level credits associated with the minor are in addition to the credits needed to complete their major (i.e., If the major is 120 credits and the additional credits in the minor are 9 credits, then the total credits to complete the major and the minor will be a minimum of 129). For example, a student earning the BSBA in business management could also minor in accounting or economics.

Outcomes Assessment Activities

Assurance of Learning

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

- **The Educational Testing Service (ETS) Major Field Test in Business**
  - This test, administered nationwide, assesses what students have learned in courses common to all business majors. Results are compared with those of other business students enrolled at selected peer institutions, as well as nationally. In the Hasan School of Business, the Major Field Test is given to students in the BSAD 493 Senior Seminar (1 c.h.) 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.

Specific Program Requirements

Specific Core Requirements

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
BSAD 101	Business-Careers and Opportunities	1
BSAD 265	Inferential Statistics & Problem Solving	3
BSAD 270	Business Communications	3
BSAD 302	Ethics in Business	3
BSAD 360	Advanced Business Statistics	3
BSAD 493	Senior Seminar	1
CIS 250	Introduction to Business Analytics	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	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 Credits		**51**

Course	Title	Credits
MGMT 318	Human Resource Management	3
CIS 365	Management Information Systems	3
MGMT 475 or MKTG 475	International Management International Marketing	3
MGMT 3/400	Electives	9
Business Electives (3/400-level)		6
Total Credits		**24**

Specific Graduation Requirements

(Accounting, Business Management, & 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. The Hasan School of Business prerequisite course requirement is a D, so that a student may progress to the next course. All business majors are required to earn a C or better in Business Core courses and 300/400-level major courses to fulfill degree requirements.

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. "In residence" courses will include Business or CIS courses offered through CSU Pueblo Extended Studies Programs. Students who complete junior- and senior-level courses at other colleges or universities with grades of C- or better, and wish to apply the credits earned toward their degree, must request approval through the Dean or Faculty Chair. Courses taken without such approval will not be counted toward the fulfillment of degree requirements.

Only the Dean or the Faculty Chair may waive any portion of these requirements and only upon written petition by a student who has demonstrated extraordinary ability.

Transfer Students

Undergraduate transfer work from other institutions is evaluated first by the Registrar's Office, but final degree determination is made by the Hasan School of Business. The School of Business reserves the right to disallow any credit that is not appropriate degree credit as determined by the School.

Summary of Graduation Requirements

(Accounting, Business Management, & Economics)

General Education: 35[1]
Business Core: 45[1]
Major: 24-39
Open Electives: 0-16

TOTAL (minimum credits): 120

[1] ECON 201 Principles of Macroeconomics (GT-SS1) (3 c.h.) and ECON 202 Principles of Microeconomics (GT-SS1) (3 c.h.) are counted in General Education.

Business Management: Agribusiness Concentration, Bachelor of Science in Business Administration

The major in business management leads to the Bachelor of Science in Business Administration (BSBA) and provides students with the theoretical and conceptual basis of business as well as application skills to assume leadership roles in industry, government and education.

The undergraduate business management major permits students to select one area as a concentration. The knowledge and skills acquired with the major in business management can be used in a number of areas, such as human resource and operations management. The business management major with an agribusiness concentration prepares students for careers in the specialized agriculture/business sector. The business management major with an information technology concentration 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.

Specific Admission Requirements

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. The Hasan School of Business prerequisite course requirement is a D, so that a student may progress to the next course. All business majors are required to earn a C or better in Business Core courses and in 300/400-level major courses to fulfill degree requirements. In addition, students must have completed the 100/200-level Business Core courses prior to enrolling in 300/400-level business courses. Additional prerequisites for Business Core courses and major courses are specified in the *Course Descriptions* section of the catalog. Business Core courses are listed alphabetically by prefix. Academic Planning Sheets are available in HSB.

Independent Studies, Directed Studies, Internships, and Special Projects will not be substituted for core or required courses. They may count as electives.

Majors & Concentration Areas

(Specific course requirements are detailed later.)

Select one:

- Accounting: 24
- Business Management: 24
- Business Management/Agribusiness: 27
- Business Management/Information Technology: 37
- Business Management/Marketing: 24
- Business Management/Sports Industry Management: 39
- Business Management/Org. Risk and Security Mgmt: 39
- Economics: 24
- Economics/Finance: 24

Business majors may take a second major in a business discipline that is **not related** to their first major discipline, provided that the additional 300/400-level credits associated with the second major are in addition to the credits needed to complete the first major (i.e., If the first major is 120 credits and the second major is 24 credits, then the total credits to complete the first major and the second major will be a minimum of 144). For example, a student earning the BSBA in business management could also major in accounting or economics.

Business majors may take a minor in a business discipline that is **not related** to their major discipline, provided that the additional 300/400-level credits associated with the minor are in addition to the credits

needed to complete their major (i.e., If the major is 120 credits and the additional credits in the minor are 9 credits, then the total credits to complete the major and the minor will be a minimum of 129). For example, a student earning the BSBA in business management could also minor in accounting or economics.

Outcomes Assessment Activities

Assurance of Learning

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

- **The Educational Testing Service (ETS) Major Field Test in Business**
  - This test, administered nationwide, assesses what students have learned in courses common to all business majors. Results are compared with those of other business students enrolled at selected peer institutions, as well as nationally. In the Hasan School of Business, the Major Field Test is given to students in the BSAD 493 Senior Seminar (1 c.h.) 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.

Learning Goals for the Business Undergraduate Program

The Hasan School of Business faculty works diligently to provide undergraduates with a high-quality education that prepares them for entry into business or into a graduate program. Our programs prepare students through achievement of five primary learning goals.

1. **Communication**
   - Our students will be able to communicate effectively.
2. **Problem Solving**
   - Our students will be able to analyze problems and develop solutions.
3. **Global Awareness**
   - Our students will be able to apply global business concepts.
4. **Ethical Awareness**
   - Our students will be able to recommend ethical alternatives and appropriate actions.
5. **Team Skills**
   - Our students will be able to demonstrate effective team skills.

Specific Program Requirements

Specific Core Requirements

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
BSAD 101	Business-Careers and Opportunities	1
BSAD 265	Inferential Statistics & Problem Solving	3
BSAD 270	Business Communications	3
BSAD 302	Ethics in Business	3
BSAD 360	Advanced Business Statistics	3
BSAD 493	Senior Seminar	1
CIS 250	Introduction to Business Analytics	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	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 Credits		**51**

Note: Courses with AREC prefix are online courses through Colorado State University – Fort Collins, in the Agriculture and Resource Economics major. These courses can be taken simultaneously through CSU Pueblo and CSU-Fort Collins to complete the degree.

Course	Title	Credits
AREC 224	INTRO TO AGRIBUSINESS ENTREPRENEURSHIP	3
ECON 302	Intermediate Microeconomics	3
MGMT 318	Human Resource Management	3
CIS 365	Management Information Systems	3
Select 15 credits in AREC Electives (3/400-level). Suggested Electives include the following:		15
AREC 305 Agri & Resource Enterprise Analysis		3
AREC 342 Water Law, Policy and Institutions		3
AREC 375 Agricultural Law		3
AREC 408 Agricultural Finance		3
AREC 478 Agricultural Policy		3
Total Credits		**27**

Students are not limited to the suggested AREC electives, and can choose other upper-division options available at CSU-Fort Collins during any given semester.

Business Management: Cannabis Industry Management Concentration, Bachelor of Science in Business Administration

Specific Admission Requirements

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. The Hasan School of Business prerequisite course requirement is a D, so that a student may progress to the next course. All business majors are required to earn a C or better in Business Core courses and in 300/400-level major courses to fulfill degree requirements. In addition, students must have completed the 100/200-level Business Core courses prior to enrolling in 300/400-level business courses. Additional prerequisites for Business Core courses and major courses are specified in the *Course Descriptions* section of the catalog. Business Core courses are listed alphabetically by prefix. Academic Planning Sheets are available in HSB.

Independent Studies, Directed Studies, Internships, and Special Projects will not be substituted for core or required courses. They may count as electives.

Student Learning Outcomes

1. Students will demonstrate a mastery knowledge of the social history of cannabis, and the impact of its use and regulation on society, culture, and the environment at the local, state, and national level.
2. Students will demonstrate a mastery knowledge of the historical trends, current status, and potential developments in cannabis-related social science research, business practices, politics, entertainment, and lifestyles.
3. Students will demonstrate the ability to effectively communicate in writing and verbally about cannabis-related issues from a variety of disciplinary perspectives.
4. Students will apply what they've learned to career endeavors through special projects, research, field experiences, and/or other independent study, as appropriate.
5. Students will apply management techniques and best practices.

Specific Program Requirements

Specific Core Requirements

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
BSAD 101	Business-Careers and Opportunities	1
BSAD 265	Inferential Statistics & Problem Solving	3
BSAD 270	Business Communications	3
BSAD 302	Ethics in Business	3
BSAD 360	Advanced Business Statistics	3
BSAD 493	Senior Seminar	1
CIS 250	Introduction to Business Analytics	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	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 Credits		**51**

Specific Concentration Requirements

Course	Title	Credits
MGMT 318	Human Resource Management	3
CIS 365	Management Information Systems	3
SOC 101	Introduction to Sociology (GT-SS3)	3
SOC 261	Introduction to Cannabis Studies	3
SOC 361	Advanced Cannabis Studies	3
MGMT 224	Intro Agribusiness Entrepreneurship	3
MGMT 362	Purchasing and Materials Management	3
MGMT 414	Entrepreneurship	3
MGMT 498	Internship	1-6
MKTG 348	Consumer Behavior	3
FIN 331	Managerial Finance: Policy, Planning and Control	3
Total Credits		**31-36**

(Accounting, Business Management, & 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. The Hasan School of Business prerequisite course requirement is a D, so that a student may progress to the next course. All business majors are required to earn a C or better in Business Core courses and 300/400-level major courses to fulfill degree requirements.

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. “In residence” courses will include Business or CIS courses offered through CSU Pueblo Extended Studies Programs. Students who complete junior- and senior-level courses at other colleges or universities with grades of C- or better, and wish to apply the credits earned toward their degree, must request approval through the Dean or Faculty Chair. Courses taken without such approval will not be counted toward the fulfillment of degree requirements.

Only the Dean or the Faculty Chair may waive any portion of these requirements and only upon written petition by a student who has demonstrated extraordinary ability.

Transfer Students

Undergraduate transfer work from other institutions is evaluated first by the Registrar’s Office, but final degree determination is made by the Hasan School of Business. The School of Business reserves the right to disallow any credit that is not appropriate degree credit as determined by the School.

Summary of Graduation Requirements

(Accounting, Business Management, & Economics)

General Education: 35[1]
Business Core: 45[1]

Major: 24-39
Open Electives: 0-16

TOTAL (minimum credits): 120

- [1]
- ECON 201 Principles of Macroeconomics (GT-SS1) (3 c.h.) and ECON 202 Principles of Microeconomics (GT-SS1) (3 c.h.) are counted in General Education.

Business Management: Information Technology Concentration, Bachelor of Science in Business Administration

The major in business management leads to the Bachelor of Science in Business Administration (BSBA) and provides students with the theoretical and conceptual basis of business as well as application skills to assume leadership roles in industry, government and education.

The undergraduate business management major permits students to select one area as an concentration. The knowledge and skills acquired with the major in business management can be used in a number of areas, such as human resource and operations management. The business management major with an agribusiness emphasis prepares students for careers in the specialized agriculture/business sector. 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.

Specific Admission Requirements

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. The Hasan School of Business prerequisite course requirement is a D, so that a student may progress to the next course. All business majors are required to earn a C or better in Business Core courses and in 300/400-level major courses to fulfill degree requirements. In addition, students must have completed the 100/200-level Business Core courses prior to enrolling in 300/400-level business courses. Additional prerequisites for Business Core courses and major courses are specified in the *Course Descriptions* section of the catalog. Business Core courses are listed alphabetically by prefix. Academic Planning Sheets are available in HSB.

Independent Studies, Directed Studies, Internships, and Special Projects will not be substituted for core or required courses. They may count as electives.

Majors & Concentration Areas

(Specific course requirements are detailed later.)

Select one:

- Accounting: 24
- Business Management: 24
- Business Management/Agribusiness: 27
- Business Management/Information Technology: 37
- Business Management/Marketing: 24
- Business Management/Sports Industry Management: 39
- Business Management/Org. Risk and Security Mgmt: 39
- Economics: 24
- Economics/Finance: 24

Business majors may take a second major in a business discipline that is **not related** to their first major discipline, provided that the additional 300/400-level credits associated with the second major are in addition to the credits needed to complete the first major (i.e., If the first major is 120 credits and the second major is 24 credits, then the total credits to complete the first major and the second major will be a minimum of 144). For example, a student earning the BSBA in business management could also major in accounting or economics.

Business majors may take a minor in a business discipline that is **not related** to their major discipline, provided that the additional 300/400-level credits associated with the minor are in addition to the credits needed to complete their major (i.e., If the major is 120 credits and the additional credits in the minor are 9 credits, then the total credits to complete the major and the minor will be a minimum of 129). For example, a student earning the BSBA in business management could also minor in accounting or economics.

Outcomes Assessment Activities

Assurance of Learning

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

- **The Educational Testing Service (ETS) Major Field Test in Business**
  - This test, administered nationwide, assesses what students have learned in courses common to all business majors. Results are compared with those of other business students enrolled at selected peer institutions, as well as nationally. In the Hasan School of Business, the Major Field Test is given to students in the BSAD 493 Senior Seminar (1 c.h.) 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.

Learning Goals for the Business Undergraduate Program

The Hasan School of Business faculty works diligently to provide undergraduates with a high-quality education that prepares them for entry into business or into a graduate program. Our programs prepare students through achievement of five primary learning goals.

1. **Communication**
   - Our students will be able to communicate effectively.
2. **Problem Solving**
   - Our students will be able to analyze problems and develop solutions.
3. **Global Awareness**
   - Our students will be able to apply global business concepts.
4. **Ethical Awareness**
   - Our students will be able to recommend ethical alternatives and appropriate actions.
5. **Team Skills**
   - Our students will be able to demonstrate effective team skills.

Specific Program Requirements

Specific Core Requirements

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
BSAD 101	Business-Careers and Opportunities	1
BSAD 265	Inferential Statistics & Problem Solving	3
BSAD 270	Business Communications	3
BSAD 302	Ethics in Business	3
BSAD 360	Advanced Business Statistics	3
BSAD 493	Senior Seminar	1
CIS 250	Introduction to Business Analytics	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	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 Credits		**51**

Specific Concentration Requirements

Course	Title	Credits
MGMT 318	Human Resource Management	3
MGMT 368	Project Management	3
MGMT 475	International Management	3
or MKTG 475	International Marketing	
CIS 150	Introduction to Computer Information Systems [1]	3
CIS 171	Introduction to Java Programming [1]	4
CIS 185	PC Architecture [1]	3
CIS 240	Systems Analysis & Design [1]	3
CIS 289	Network Concepts [1]	3
CIS 311	Introduction to Web Development	3
CIS 350	Database Management	3
MGMT 3/400	Elective	3
Business/CIS	Elective (3/400-level)	3
Additional Requirements		
Select 2 credits in Open Electives		2
Total Credits		**39**

[1] CIS 150 Introduction to Computer Information Systems (3 c.h.), CIS 171 Introduction to Java Programming (4 c.h.), CIS 185 PC Architecture (3 c.h.), CIS 240 Systems Analysis & Design (3 c.h.), and CIS 289 Network Concepts (3 c.h.) replace the 15 credits of open electives in the Business Management graduation requirements.

Business Management: Organizational Risk & Security Management Concentration, Bachelor of Science in Business Administration

The major in business management leads to the Bachelor of Science in Business Administration (BSBA) and provides students with the theoretical and conceptual basis of business as well as application skills to assume leadership roles in industry, government and education.

The undergraduate business management major permits students to select one area as an concentration. The knowledge and skills acquired with the major in business management can be used in a number of areas, such as human resource and operations management. The business management major with an agribusiness emphasis prepares students for careers in the specialized agriculture/business sector. 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.

Specific Admission Requirements

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. The Hasan School of Business prerequisite course requirement is a D, so that a student may progress to the next course. All business majors are required to earn a C or better in Business Core courses and in 300/400-level major courses to fulfill degree requirements. In addition, students must have completed the 100/200-level Business Core courses prior to enrolling in 300/400-level business courses. Additional prerequisites for Business Core courses and major courses are specified in the *Course Descriptions* section of the catalog. Business Core courses are listed alphabetically by prefix. Academic Planning Sheets are available in HSB.

Independent Studies, Directed Studies, Internships, and Special Projects will not be substituted for core or required courses. They may count as electives.

Majors & Concentration Areas

(Specific course requirements are detailed later.)

Select one:

- Accounting: 24
- Business Management: 24
- Business Management/Agribusiness: 27
- Business Management/Information Technology: 37
- Business Management/Marketing: 24
- Business Management/Sports Industry Management: 39
- Business Management/Org. Risk and Security Mgmt: 39
- Economics: 24
- Economics/Finance: 24

Business majors may take a second major in a business discipline that is **not related** to their first major discipline, provided that the additional 300/400-level credits associated with the second major are in addition to the credits needed to complete the first major (i.e., If the first major is 120 credits and the second major is 24 credits, then the total credits to complete the first major and the second major will be a minimum of 144). For example, a student earning the BSBA in business management could also major in accounting or economics.

Business majors may take a minor in a business discipline that is **not related** to their major discipline, provided that the additional 300/400-level credits associated with the minor are in addition to the credits needed to complete their major (i.e., If the major is 120 credits and the additional credits in the minor are 9 credits, then the total credits to complete the major and the minor will be a minimum of 129). For example, a student earning the BSBA in business management could also minor in accounting or economics.

Outcomes Assessment Activities

Assurance of Learning

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

- **The Educational Testing Service (ETS) Major Field Test in Business**
  - This test, administered nationwide, assesses what students have learned in courses common to all business majors. Results are compared with those of other business students enrolled at selected peer institutions, as well as nationally. In the Hasan School of Business, the Major Field Test is given to students in the BSAD 493 Senior Seminar (1 c.h.) 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.

Learning Goals for the Business Undergraduate Program

The Hasan School of Business faculty works diligently to provide undergraduates with a high-quality education that prepares them for entry into business or into a graduate program. Our programs prepare students through achievement of five primary learning goals.

1. **Communication**
   - Our students will be able to communicate effectively.
2. **Problem Solving**
   - Our students will be able to analyze problems and develop solutions.
3. **Global Awareness**
   - Our students will be able to apply global business concepts.
4. **Ethical Awareness**
   - Our students will be able to recommend ethical alternatives and appropriate actions.
5. **Team Skills**
   - Our students will be able to demonstrate effective team skills.

Specific Program Requirements

Specific Core Requirements

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
BSAD 101	Business-Careers and Opportunities	1
BSAD 265	Inferential Statistics & Problem Solving	3
BSAD 270	Business Communications	3
BSAD 302	Ethics in Business	3
BSAD 360	Advanced Business Statistics	3
BSAD 493	Senior Seminar	1
CIS 250	Introduction to Business Analytics	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	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 Credits		**51**

Specific Concentration Requirements

Course	Title	Credits
MGMT 318	Human Resource Management	3
CIS 365	Management Information Systems	3
MGMT 368	Project Management	3
MGMT 475	International Management	3
or BSAD 475	International Business	
CIS 150	Introduction to Computer Information Systems	3
CIS 461	IT Security Risk Management	3
BUS/CIS/POLS	Elective	3
POLS 270	Introduction to Homeland Security	3
POLS 271	Terrorism	3
POLS 272	Critical Incident Management	3
POLS 375	Threat & Strategic Planning	3
POLS 376	Cyber Law	3
BUS/CIS/POLS	Elective	3
Total Credits		**39**

Business Management: Sports Industry Management Concentration, Bachelor of Science in Business Administration

The major in business management leads to the Bachelor of Science in Business Administration (BSBA) and provides students with the theoretical and conceptual basis of business as well as application skills to assume leadership roles in industry, government and education.

The undergraduate business management major permits students to select one area as a concentration. The knowledge and skills acquired with the major in business management can be used in a number of areas, such as human resource and operations management. The business management major with an agribusiness emphasis prepares students for careers in the specialized agriculture/business sector. 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.

Specific Admission Requirements

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. The Hasan School of Business prerequisite course requirement is a D, so that a student may progress to the next course. All business majors are required to earn a C or better in Business Core courses and in 300/400-level major courses to fulfill degree requirements. In addition, students must have completed the 100/200-level Business Core courses prior to enrolling in 300/400-level business courses. Additional prerequisites for Business Core courses and major courses are specified in the *Course Descriptions* section of the catalog. Business Core courses are listed alphabetically by prefix. Academic Planning Sheets are available in HSB.

Independent Studies, Directed Studies, Internships, and Special Projects will not be substituted for core or required courses. They may count as electives.

Majors & Concentration Areas

(Specific course requirements are detailed later.)

Select one:

- Accounting: 24
- Business Management: 24
- Business Management/Agribusiness: 27
- Business Management/Information Technology: 37
- Business Management/Marketing: 24
- Business Management/Sports Industry Management: 39
- Business Management/Org. Risk and Security Mgmt: 39
- Economics: 24
- Economics/Finance: 24

Business majors may take a second major in a business discipline that is **not related** to their first major discipline, provided that the additional 300/400-level credits associated with the second major are in addition to the credits needed to complete the first major (i.e., If the first major is 120 credits and the second major is 24 credits, then the total credits to complete the first major and the second major will be a minimum of 144). For example, a student earning the BSBA in business management could also major in accounting or economics.

Business majors may take a minor in a business discipline that is **not related** to their major discipline, provided that the additional 300/400-level credits associated with the minor are in addition to the credits needed to complete their major (i.e., If the major is 120 credits and the additional credits in the minor are 9 credits, then the total credits to complete the major and the minor will be a minimum of 129). For example, a student earning the BSBA in business management could also minor in accounting or economics.

Outcomes Assessment Activities

Assurance of Learning

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

improvements. In addition to course grades, direct measures of student performance in the school of Business include:

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Learning Goals for the Business Undergraduate Program

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   - Our students will be able to apply global business concepts.
4. **Ethical Awareness**
   - Our students will be able to recommend ethical alternatives and appropriate actions.
5. **Team Skills**
   - Our students will be able to demonstrate effective team skills.

Specific Program Requirements

Specific Core Requirements

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
BSAD 101	Business-Careers and Opportunities	1
BSAD 265	Inferential Statistics & Problem Solving	3
BSAD 270	Business Communications	3
BSAD 302	Ethics in Business	3
BSAD 360	Advanced Business Statistics	3
BSAD 493	Senior Seminar	1
CIS 250	Introduction to Business Analytics	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	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 Credits		**51**

Specific Concentration Requirements

Course	Title	Credits
MGMT 318	Human Resource Management	3
MKTG 342	Promotional Strategy	3
CIS 365	Management Information Systems	3
MGMT 368	Project Management	3
MKTG 388	Sports Industry Marketing	3
MGMT 488	Sports Industry Management	3
MGMT 498	Internship	3
BUS/CIS/EPER	Elective	3
PSYC 205	Introduction to Sport Psychology	3
REC 240	RECREATION PROGRAM DESIGN	3
REC 250	COMMERCIAL RECREATION AND TOURISM	3
REC 350	LEADERSHIP AND ETHICS	3
REC 485	RECREATION FACILITY DESIGN/MANAGEMENT	3
Total Credits		**39**

Computer Information Systems, Bachelor of Science

The Bachelor of Science (BS) degree in Computer Information Systems (CIS) prepares graduates for successful careers in the information technology (IT) fields such as cyber security, data analytics, and software development. 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.

Program Objectives

The program seeks to develop a deeper understanding of the role of information systems within organizations and the processes that support technology-enabled business development.

At the conclusion of the CIS program, students will demonstrate the ability to:

1. Analyze, design, implement, and maintain an information system.
2. Communicate clearly and effectively in writing and speaking.
3. Work effectively as a team member for a common purpose.
4. Identify ethical issues and provide alternatives or solutions.

Outcomes Assessment Activities

The CIS program primarily uses a direct-assessment approach. Artifacts of student work pertinent to a particular learning outcome are collected. These artifacts are then evaluated by faculty external to the course in which the artifact was collected to determine students' level of mastery. Each learning outcome has been separated into sub-skills, or "measurable objectives", that are components of the overall learning objectives. Students' level of mastery is assessed using rubrics which

have been developed for this purpose. To ensure inter-rater reliability, we implement processes whereby raters meet before and after artifacts are assessed. In addition, for follow-up (loop-closing) activities on subsequent artifact evaluation, the same raters are utilized when possible, for consistency and reliability.

The CIS program includes a senior capstone project course required of all majors. This course requires students to apply the communication, problem solving, and technical skills they have learned during the completion of the CIS program. Each team of students is assigned a live project in the Pueblo community (or sometimes surrounding areas). The team is evaluated on not only the final IT product they develop, but the process they follow in completing the project.

Finally, the CIS program meets annually with the CIS Industrial Advisory Committee to get feedback on the effectiveness of the CIS curriculum in meeting the needs of the IT industry along the Colorado Front Range. The CIS program also requires CIS graduates to complete a survey to determine the effectiveness of the program and curriculum in preparing them for jobs in IT.

Specific Program Requirements

CIS majors are encouraged to complete a minor in Business Administration or another Business-related minor.

Course	Title	Credits
General Education		**35**
Please refer to "Specific General Education Requirements"		
Quantitative Analysis Requirement		**10**
MATH 220	Quantitative Analysis for Business	4
BSAD 265	Inferential Statistics & Problem Solving	3
BSAD 360	Advanced Business Statistics	3
Required Related non-CIS Courses		**9**
BSAD 270	Business Communications	3
MGMT 201	Principles of Management	3
MGMT 368	Project Management	3
Open Electives		**8**
CIS Major Courses		**37**
CIS 105	Introduction to Access DBMS	1
CIS 120	Introduction to Programming with Python	3
CIS 150	Introduction to Computer Information Systems	3
CIS 171	Introduction to Java Programming	4
CIS 210	Introduction to Cyber Security	3
CIS 240	Systems Analysis & Design	3
CIS 250	Introduction to Business Analytics	3
CIS 271	Advanced Program Design with Java	4
CIS 289	Network Concepts	3
CIS 311	Introduction to Web Development	3
CIS 315	Linux Fundamentals	3
CIS 350	Database Management	3
CIS 493	Senior Seminar	1
CIS 3/400 Upper Division Electives		**21**
Total Credits		**120**

Specific General Education Requirements

Course	Title	Credits
Humanities		
CID 103	Speaking & Listening	3
Social Science		
ECON 201 & ECON 202	Principles of Macroeconomics (GT-SS1) and Principles of Microeconomics (GT-SS1)	6
Mathematics		
MATH 101	Introductory College Mathematics (GT-MA1)	3

CIS Upper Division Electives

Special Projects and Internships will not be substituted for required CIS Major courses. They may count only as electives. CIS majors who do not claim any emphasis area need to choose 12 credits from the following upper division electives.

Course	Title	Credits
CIS 359	ADVANCED PROGRAMMING WITH C#	3
CIS 365	Management Information Systems	3
CIS 386	Android Application Development	3
CIS 401	Network Systems Administration	3
CIS 410	Data Analytics with Python	3
CIS 411	INTERNET SERVER-SIDE PROGRAMMING	3
CIS 450	Advanced Data Analytics	3
CIS 460	Cyber Security & Defense	3
CIS 461	IT Security Risk Management	3
CIS 462	Computer Forensics	3
CIS 490	Special Projects	1-5
CIS 491	Special Topics	1-5
CIS 498	Internship	1-5

In addition to the requirement to complete (BSAD 265 Inferential Statistics & Problem Solving (3 c.h.), BSAD 270 Business Communications (3 c.h.), BSAD 360 Advanced Business Statistics (3 c.h.), ECON 201 Principles of Macroeconomics (GT-SS1) (3 c.h.), ECON 202 Principles of Microeconomics (GT-SS1) (3 c.h.), MGMT 201 Principles of Management (3 c.h.), MGMT 368 Project Management (3 c.h.), MATH 101 Introductory College Mathematics (GT-MA1) (3 c.h.) and MATH 220 Quantitative Analysis for Business (4 c.h.)), CIS majors are strongly encouraged to complete a minor in Business Administration.

Specific Graduation 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.

Summary of Graduation Requirements (CIS)

General Education: 36[1]
Quantitative Analysis Requirement: 10
Required Related: 9

Open Electives: 13
Major: 52

TOTAL (minimum credits): 120

Computer Information Systems, Minor

The minor in computer information systems (CIS) prepares students to remain at the forefront of the rapidly changing environment in technology and technology related fields. From computer tools and software applications to the technical expertise needed for survival in the digital age, the minor in CIS is designed to give CSU Pueblo students a broad exposure to the latest technology developments and trends.

Through in-depth and hands-on labs and course experiences, students will acquire practical and marketable IT skills that are currently in demand in areas such as data analytics, machine learning, Windows and mobile phone applications and programming, network administration, cyber security, IT security risk management, and more.

Specific Program Requirements

Course	Title	Credits
CIS Minor Core		
CIS 105	Introduction to Access DBMS	1
CIS 150	Introduction to Computer Information Systems	3
CIS 171	Introduction to Java Programming	4
CIS 240	Systems Analysis & Design	3
CIS 250	Introduction to Business Analytics	3
Electives		
CIS 3/400	Upper Division Courses [1]	9
Total Credits		**23**

CIS Upper Division Courses

CIS minors must select 9 credits from the following upper division courses:

Course	Title	Credits
CIS 311	Introduction to Web Development	3
CIS 315	Linux Fundamentals	3
CIS 350	Database Management	3
CIS 359	ADVANCED PROGRAMMING WITH C#	3
CIS 365	Management Information Systems	3
CIS 386	Android Application Development	3
CIS 401	Network Systems Administration	3
CIS 410	Data Analytics with Python	3
CIS 411	INTERNET SERVER-SIDE PROGRAMMING	3
CIS 450	Advanced Data Analytics	3
CIS 460	Cyber Security & Defense	3
CIS 461	IT Security Risk Management	3
CIS 462	Computer Forensics	3

Computer Information Systems: Cyber Security Concentration, Bachelor of Science

The Bachelor of Science in Computer Information Systems (BS-CIS) with a cyber security concentration prepares students for a variety of IT managerial and technical cyber security and cyber defense positions. Students will gain working knowledge in a multitude of areas such as identifying cyber threats, cyber-exploits, network and server side attacks, defensive IT countermeasures, wireless network security, cryptography, password cracking, web exploitation, cyber terrorism, and various aspects of identifying threat vulnerabilities, IT security risk management, disaster recovery planning, cyber law, information assurance (IA), and more.

Cyber security concentration students will acquire the core cyber security knowledge that is required for key technical and managerial IT security positions. Students will develop the foundational skills needed to be successful in their chosen cyber security career path.

Program Objectives

The program seeks to develop a deeper understanding of the role of information systems within organizations and the processes that support technology-enabled business development.

At the conclusion of the CIS program, students will demonstrate the ability to:

1. Analyze, design, implement, and maintain an information system.
2. Communicate clearly and effectively in writing and speaking.
3. Work effectively as a team member for a common purpose.
4. Identify ethical issues and provide alternatives or solutions.

Specific Program Requirements

CIS majors are encouraged to complete a minor in Business Administration or another Business-related minor.

Course	Title	Credits
General Education		**35**
Please refer to "Specific General Education Requirements"		
Quantitative Analysis Requirement		**10**
MATH 220	Quantitative Analysis for Business	4
BSAD 265	Inferential Statistics & Problem Solving	3
BSAD 360	Advanced Business Statistics	3
Required Related Courses		**9**
BSAD 270	Business Communications	3
MGMT 201	Principles of Management	3
MGMT 368	Project Management	3
Open Electives [2]		**8**
CIS Major Courses		**37**
CIS 105	Introduction to Access DBMS	1
CIS 120	Introduction to Programming with Python	3
CIS 150	Introduction to Computer Information Systems	3
CIS 171	Introduction to Java Programming	4
CIS 210	Introduction to Cyber Security	3
CIS 240	Systems Analysis & Design	3

CIS 250	Introduction to Business Analytics	3
CIS 271	Advanced Program Design with Java	4
CIS 289	Network Concepts	3
CIS 311	Introduction to Web Development	3
CIS 315	Linux Fundamentals	3
CIS 350	Database Management	3
CIS 493	Senior Seminar	1
Cyber Security Concentration		**12**
CIS 401	Network Systems Administration	3
CIS 460	Cyber Security & Defense	3
CIS 461	IT Security Risk Management	3
CIS 462	Computer Forensics	3
CIS 3/400 Upper Division Electives		9
Total Credits		**120**

Specific General Education Requirements

Course	Title	Credits
Humanities		
CID 103	Speaking & Listening	3
Social Science		
ECON 201 & ECON 202	Principles of Macroeconomics (GT-SS1) and Principles of Microeconomics (GT-SS1)	6
Mathematics		
MATH 101	Introductory College Mathematics (GT-MA1)	3

Specific Graduation 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.

Summary of Graduation Requirements (CIS)

General Education: 36[1]
Quantitative Analysis Requirement: 10
Required Related: 9
Open Electives: 13
Major: 52

TOTAL (minimum credits): 120

Computer Information Systems: Data Analytics Concentration, Bachelor of Science

The Bachelor of Science in Computer Information Systems (BS-CIS) with a data analytics concentration prepares students across all industries to leverage the power of big data to identify and solve problems and improve decision-making.

Students will be on the leading edge of this growing field after completing the program. They will learn a variety of data analytic techniques such as Excel decision-making models, data analytics programming with Python, SQL database management, data visualization with tools such as Tableau, and more advanced technologies such as cloud computing, artificial intelligence, and deep learning. Students will gain the necessary data analytical skills needed to guide critical business decisions in their chosen career path.

Program Objectives

The program seeks to develop a deeper understanding of the role of information systems within organizations and the processes that support technology-enabled business development.

At the conclusion of the CIS program, students will demonstrate the ability to:

1. Analyze, design, implement, and maintain an information system.
2. Communicate clearly and effectively in writing and speaking.
3. Work effectively as a team member for a common purpose.
4. Identify ethical issues and provide alternatives or solutions.

Outcomes Assessment Activities

The CIS program primarily uses a direct-assessment approach. Artifacts of student work pertinent to a particular learning outcome are collected. These artifacts are then evaluated by faculty external to the course in which the artifact was collected to determine students' level of mastery. Each learning outcome has been separated into sub-skills, or "measurable objectives", that are components of the overall learning objectives. Students' level of mastery is assessed using rubrics which have been developed for this purpose. To ensure inter-rater reliability, we implement processes whereby raters meet before and after artifacts are assessed. In addition, for follow-up (loop-closing) activities on subsequent artifact evaluation, the same raters are utilized when possible, for consistency and reliability.

The CIS program includes a senior capstone project course required of all majors. This course requires students to apply the communication, problem solving, and technical skills they have learned during the completion of the CIS program. Each team of students is assigned a live project in the Pueblo community (or sometimes surrounding areas). The team is evaluated on not only the final IT product they develop, but the process they follow in completing the project.

Finally, the CIS program meets annually with the CIS Industrial Advisory Committee to get feedback on the effectiveness of the CIS curriculum in meeting the needs of the IT industry along the Colorado Front Range. The CIS program also requires CIS graduates to complete a survey to determine the effectiveness of the program and curriculum in preparing them for jobs in IT.

Specific Program Requirements

CIS majors are encouraged to complete a minor in Business Administration or another Business-related minor

Course	Title	Credits
General Education		**35**
Please refer to "Specific General Education Requirements"		
Quantitative Analysis Requirement		**10**
MATH 220	Quantitative Analysis for Business	4

BSAD 265	Inferential Statistics & Problem Solving	3
BSAD 360	Advanced Business Statistics	3
Required Related non-CIS Courses		**9**
BSAD 270	Business Communications	3
MGMT 201	Principles of Management	3
MGMT 368	Project Management	3
Open Electives [1]		**8**
CIS Major Courses		**37**
CIS 105	Introduction to Access DBMS	1
CIS 120	Introduction to Programming with Python	3
CIS 150	Introduction to Computer Information Systems	3
CIS 171	Introduction to Java Programming	4
CIS 210	Introduction to Cyber Security	3
CIS 240	Systems Analysis & Design	3
CIS 250	Introduction to Business Analytics	3
CIS 271	Advanced Program Design with Java	4
CIS 289	Network Concepts	3
CIS 311	Introduction to Web Development	3
CIS 315	Linux Fundamentals	3
CIS 350	Database Management	3
CIS 493	Senior Seminar	1
Data Analytics Concentration		**21**
CIS 410	Data Analytics with Python	3
CIS 450	Advanced Data Analytics	3
CIS 460	Cyber Security & Defense	3
CIS 470	Virtualization & Cloud Technologies	3
or CIS 359	ADVANCED PROGRAMMING WITH C#	
CIS 3/400 Upper Division Electives		9
Total Credits		**120**

[1] 3 credits must be upper division

Specific General Education Requirements

Course	Title	Credits
Humanities		
CID 103	Speaking & Listening	3
Social Science		
ECON 201 & ECON 202	Principles of Macroeconomics (GT-SS1) and Principles of Microeconomics (GT-SS1)	6
Mathematics		
MATH 101	Introductory College Mathematics (GT-MA1)	3

Specific Graduation 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.

Summary of Graduation Requirements (CIS)

General Education: 36
Quantitative Analysis Requirement: 10
Required Related: 9
Open Electives: 13
Major: 52

TOTAL (minimum credits): 120

Computer Information Systems: Software Development Concentration, Bachelor of Science

The Bachelor of Science in Computer Information Systems with a software development concentration prepares students for a variety of programming and software development positions.

Students will learn foundational and advanced programming concepts in areas such as object-oriented programming, scripting languages, Android and iOS development, web application development, machine learning, artificial intelligence, and more. Through the curriculum, students are able to gain theoretical and practical knowledge and skills to build high-quality software products in their chosen career path.

Program Objectives

The program seeks to develop a deeper understanding of the role of information systems within organizations and the processes that support technology-enabled business development.

At the conclusion of the CIS program, students will demonstrate the ability to:

1. Analyze, design, implement, and maintain an information system.
2. Communicate clearly and effectively in writing and speaking.
3. Work effectively as a team member for a common purpose.
4. Identify ethical issues and provide alternatives or solutions.

Outcomes Assessment Activities

The CIS program primarily uses a direct-assessment approach. Artifacts of student work pertinent to a particular learning outcome are collected. These artifacts are then evaluated by faculty external to the course in which the artifact was collected to determine students' level of mastery. Each learning outcome has been separated into sub-skills, or "measurable objectives", that are components of the overall learning objectives. Students' level of mastery is assessed using rubrics which have been developed for this purpose. To ensure inter-rater reliability, we implement processes whereby raters meet before and after artifacts are assessed. In addition, for follow-up (loop-closing) activities on subsequent artifact evaluation, the same raters are utilized when possible, for consistency and reliability.

The CIS program includes a senior capstone project course required of all majors. This course requires students to apply the communication, problem solving, and technical skills they have learned during the completion of the CIS program. Each team of students is assigned a live project in the Pueblo community (or sometimes surrounding areas). The team is evaluated on not only the final IT product they develop, but the process they follow in completing the project.

Finally, the CIS program meets annually with the CIS Industrial Advisory Committee to get feedback on the effectiveness of the CIS curriculum in meeting the needs of the IT industry along the Colorado Front Range. The CIS program also requires CIS graduates to complete a survey to determine the effectiveness of the program and curriculum in preparing them for jobs in IT.

Specific Program Requirements

CIS majors are encouraged to complete a minor in Business Administration or another Business-related minor.

Course	Title	Credits
General Education [1]		**35**
Please refer to "Specific General Education Requirements"		
Quantitative Analysis Requirement		**10**
MATH 220	Quantitative Analysis for Business	4
BSAD 265	Inferential Statistics & Problem Solving	3
BSAD 360	Advanced Business Statistics	3
Required Related non-CIS Courses		**9**
BSAD 270	Business Communications	3
MGMT 201	Principles of Management	3
MGMT 368	Project Management	3
Open Electives [1]		**8**
CIS Major Courses		**37**
CIS 105	Introduction to Access DBMS	1
CIS 120	Introduction to Programming with Python	3
CIS 150	Introduction to Computer Information Systems	3
CIS 171	Introduction to Java Programming	4
CIS 210	Introduction to Cyber Security	3
CIS 240	Systems Analysis & Design	3
CIS 250	Introduction to Business Analytics	3
CIS 271	Advanced Program Design with Java	4
CIS 289	Network Concepts	3
CIS 311	Introduction to Web Development	3
CIS 315	Linux Fundamentals	3
CIS 350	Database Management	3
CIS 493	Senior Seminar	1
Software Development Concentration		**21**
CIS 359	ADVANCED PROGRAMMING WITH C#	3
CIS 386	Android Application Development	3
CIS 410	Data Analytics with Python	3
or CIS 450	Advanced Data Analytics	
CIS 411	INTERNET SERVER-SIDE PROGRAMMING	3
CIS 3/400 Upper Division Electives		9
Total Credits		**120**

[1] 3 credits must be upper division.

Specific General Education Requirements

Course	Title	Credits
Humanities		
CID 103	Speaking & Listening	3
Social Science		
ECON 201 & ECON 202	Principles of Macroeconomics (GT-SS1) and Principles of Microeconomics (GT-SS1)	6
Mathematics		
MATH 101	Introductory College Mathematics (GT-MA1)	3

Specific Graduation 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.

Summary of Graduation Requirements (CIS)

General Education: 36
Quantitative Analysis Requirement: 10
Required Related: 9
Open Electives: 13
Major: 52

TOTAL (minimum credits): 120

Cyber Security, Minor

Student Learning Outcomes

At the conclusion of the minor in cybersecurity program, students will demonstrate:

1. The ability to analyze, integrate and synthesize information and cyber security concepts.
2. The ability to understand and utilize information. data into methodologies and frameworks to identify cyber security threats and exploits for analysis and resolution.
3. The ability to understand appropriate application of cyber security defense (CD) tools, CD techniques, hardware/ software and I.T. safeguards to defend IS systems from cyber exploits, attacks.
4. The ability to develop team skills to work effectively on CSU Pueblo cyber team field projects.
5. The ability to communicate cyber security issues clearly, in writing and orally to an audience, particularly with regard to the technical analysis of cyber-threat issues, solutions and tactics.
6. Understand the best application of Info Security Models, Cyber Sec Planning and Policies to analyze, integrate appropriate cyber security methodologies into viable solutions.
7. As a team project members, the ability to develop and communicate Threat-Vulnerability-Asset (TVA) grids and IT solutions for cyber attack and vulnerability risk analysis.
8. Demonstrate the ability to develop Disaster Recovery, Business Continuity and Risk Mitigation Strategies and solutions within financial, ethical and cyber Law boundaries.

Specific Program Requirements

Course	Title	Credits
CIS 210	Introduction to Cyber Security	3
CIS 250	Introduction to Business Analytics	3
CIS 289	Network Concepts	3
CIS 315	Linux Fundamentals	3
CIS 460	Cyber Security & Defense	3
CIS 461	IT Security Risk Management	3
CIS 462	Computer Forensics	3
Total Credits		**21**

Data Analytics, Minor

The data analytics minor prepares students across all industries to leverage the power of big data to identify and solve problems and improve decision-making. Students will be on the leading edge of this growing field after completing the program. They will learn a variety of data analytic techniques such as Excel decision making models, data analytics programming with Python, SQL database management, data visualization with tools such as Tableau, and more advanced technologies such as cloud computing, artificial intelligence, and deep learning.

Specific Program Requirements

(This minor is open to all majors except CIS with a Data Analytics Concentration)

Course	Title	Credits
BSAD 265	Inferential Statistics & Problem Solving	3
BSAD 360	Advanced Business Statistics	3
CIS 250	Introduction to Business Analytics	3
CIS 350	Database Management	3
CIS 365	Management Information Systems	3
CIS 450	Advanced Data Analytics	3
MGMT 201	Principles of Management	3
Total Credits		**21**

[1] For BSAD 265 Inferential Statistics & Problem Solving (3 c.h.) substitution include one of the following: MATH 156 Introduction to Statistics (GT-MA1) (3 c.h.) or EN 275 Stochastic Systems (4 c.h.).

[2] For BSAD 360 Advanced Business Statistics (3 c.h.) substitution include one of the following: MATH 356 Statistics for Engineers & Scientists (3 c.h.), EN 375 Stochastic Systems Engineering (3 c.h.), PSYC 209 Quantitative Research II (3 c.h.), NSG 371 Healthcare Informatics (2 c.h.), or EPER 343 Research and Statistics (3 c.h.).

Economics, Bachelor of Science in Business Administration

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.

Specific Admission Requirements

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. The Hasan School of Business prerequisite course requirement is a D, so that a student may progress to the next course. All business majors are required to earn a C or better in Business Core courses and in 300/400-level major courses to fulfill degree requirements. In addition, students must have completed the 100/200-level Business Core courses prior to enrolling in 300/400-level business courses. Additional prerequisites for Business Core courses and major courses are specified in the *Course Descriptions* section of the catalog. Business Core courses are listed alphabetically by prefix. Academic Planning Sheets are available in HSB.

Independent Studies, Directed Studies, Internships, and Special Projects will not be substituted for core or required courses. They may count as electives.

Majors & Concentration Areas

(Specific course requirements are detailed later.)

Select one:

- Accounting: 24
- Business Management: 24
- Business Management/Agribusiness: 27
- Business Management/Information Technology: 37
- Business Management/Marketing: 24
- Business Management/Sports Industry Management: 39
- Business Management/Org. Risk and Security Mgmt: 39
- Economics: 24
- Economics/Finance: 24

Business majors may take a second major in a business discipline that is **not related** to their first major discipline, provided that the additional 300/400-level credits associated with the second major are in addition to the credits needed to complete the first major (i.e., If the first major is 120 credits and the second major is 24 credits, then the total credits to complete the first major and the second major will be a minimum of 144). For example, a student earning the BSBA in business management could also major in accounting or economics.

Business majors may take a minor in a business discipline that is **not related** to their major discipline, provided that the additional 300/400-level credits associated with the minor are in addition to the credits needed to complete their major (i.e., If the major is 120 credits and

the additional credits in the minor are 9 credits, then the total credits to complete the major and the minor will be a minimum of 129). For example, a student earning the BSBA in business management could also minor in accounting or economics.

Outcomes Assessment Activities

Assurance of Learning

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

- **The Educational Testing Service (ETS) Major Field Test in Business**
  - This test, administered nationwide, assesses what students have learned in courses common to all business majors. Results are compared with those of other business students enrolled at selected peer institutions, as well as nationally. In the Hasan School of Business, the Major Field Test is given to students in the BSAD 493 Senior Seminar (1 c.h.) 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.

Specific Program Requirements

Specific Core Requirements

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
BSAD 101	Business-Careers and Opportunities	1
BSAD 265	Inferential Statistics & Problem Solving	3
BSAD 270	Business Communications	3
BSAD 302	Ethics in Business	3
BSAD 360	Advanced Business Statistics	3
BSAD 493	Senior Seminar	1
CIS 250	Introduction to Business Analytics	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	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 Credits		**51**

Specific Major Requirements

Course	Title	Credits
ECON 302	Intermediate Microeconomics	3
ECON 310	Money and Banking	3
ECON 420	Regional Economic Analysis	3
FIN 3/400	Elective	3
BSAD 480	Business Consulting	3
MGMT 414	Entrepreneurship	3
Select 6 credits in Business Electives (3/400-level)		6
Total Credits		**24**

Specific Graduation Requirements

(Accounting, Business Management, & 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. The Hasan School of Business prerequisite course requirement is a D, so that a student may progress to the next course. All business majors are required to earn a C or better in Business Core courses and 300/400-level major courses to fulfill degree requirements.

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. "In residence" courses will include Business or CIS courses offered through CSU Pueblo Extended Studies Programs. Students who complete junior- and senior-level courses at other colleges or universities with grades of C- or better, and wish to apply the credits earned toward their degree, must request approval through the Dean or Faculty Chair. Courses taken without such approval will not be counted toward the fulfillment of degree requirements.

Only the Dean or the Faculty Chair may waive any portion of these requirements and only upon written petition by a student who has demonstrated extraordinary ability.

Transfer Students

Undergraduate transfer work from other institutions is evaluated first by the Registrar's Office, but final degree determination is made by the Hasan School of Business. The School of Business reserves the right to disallow any credit that is not appropriate degree credit as determined by the School.

Summary of Graduation Requirements

(Accounting, Business Management, & Economics)

General Education: 35[1]
Business Core: 45[1]
Major: 24-39
Open Electives: 0-16

TOTAL (minimum credits): 120

[1] ECON 201 Principles of Macroeconomics (GT-SS1) (3 c.h.) and ECON 202 Principles of Microeconomics (GT-SS1) (3 c.h.) are counted in General Education.

Economics, Minor

Specific Program Requirements

(Open to Accounting, Management, & non-business majors only)

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	3
ECON 302	Intermediate Microeconomics	3
ECON 310	Money and Banking	3
MGMT 201	Principles of Management	3
Select **one** of the following:		3
ECON 420	Regional Economic Analysis	3
FIN 3/400	Elective	3
BSAD 480	Business Consulting	3
MGMT 414	Entrepreneurship	3
Total Credits		**21**

Economics: Finance Concentration, Bachelor of Science in Business Administration

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.

Specific Admission Requirements

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. The Hasan School of Business prerequisite course requirement is a D, so that a student may progress to the next course. All business majors are required to earn a C or better in Business Core courses and in 300/400-level major courses to fulfill degree requirements. In addition, students must have completed the 100/200-level Business Core courses prior to enrolling in 300/400-level business courses. Additional prerequisites for Business Core courses and major courses are specified in the *Course Descriptions* section of the catalog. Business Core courses are listed alphabetically by prefix. Academic Planning Sheets are available in HSB.

Independent Studies, Directed Studies, Internships, and Special Projects will not be substituted for core or required courses. They may count as electives.

Majors & Concentration Areas

(Specific course requirements are detailed later.)

Select one:

- Accounting: 24
- Business Management: 24
- Business Management/Agribusiness: 27
- Business Management/Information Technology: 37
- Business Management/Marketing: 24
- Business Management/Sports Industry Management: 39
- Business Management/Org. Risk and Security Mgmt: 39
- Economics: 24
- Economics/Finance: 24

Business majors may take a second major in a business discipline that is **not related** to their first major discipline, provided that the additional 300/400-level credits associated with the second major are in addition to the credits needed to complete the first major (i.e., If the first major is 120 credits and the second major is 24 credits, then the total credits to complete the first major and the second major will be a minimum of 144). For example, a student earning the BSBA in business management could also major in accounting or economics.

Business majors may take a minor in a business discipline that is **not related** to their major discipline, provided that the additional 300/400-level credits associated with the minor are in addition to the credits needed to complete their major (i.e., If the major is 120 credits and the additional credits in the minor are 9 credits, then the total credits to complete the major and the minor will be a minimum of 129). For example, a student earning the BSBA in business management could also minor in accounting or economics.

Outcomes Assessment Activities

Assurance of Learning

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

- **The Educational Testing Service (ETS) Major Field Test in Business**
  - This test, administered nationwide, assesses what students have learned in courses common to all business majors. Results are compared with those of other business students enrolled at selected peer institutions, as well as nationally. In the Hasan School of Business, the Major Field Test is given to students in the BSAD 493 Senior Seminar (1 c.h.) 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.

Specific Program Requirements

Specific Core Requirements

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
BSAD 101	Business-Careers and Opportunities	1
BSAD 265	Inferential Statistics & Problem Solving	3
BSAD 270	Business Communications	3
BSAD 302	Ethics in Business	3
BSAD 360	Advanced Business Statistics	3
BSAD 493	Senior Seminar	1
CIS 250	Introduction to Business Analytics	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	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 Credits		**51**

Specific Concentration Requirements

Course	Title	Credits
ECON 302	Intermediate Microeconomics	3
ECON 310	Money and Banking	3
FIN 3/400	Electives (one of FIN electives could be replaced by ECON 325 – Real Estate Economics)	12
Select 6 credits in Business Electives 3/400-level		6
Total Credits		**24**

Finance, Minor

Specific Program Requirements

(Open to Accounting, Management, & non-business majors only)

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	3
FIN 330	Principles of Finance	3
FIN 3/400	Electives	6
MGMT 201	Principles of Management	3
Total Credits		**21**

A GPA of 2.000 or higher is required for the minors.

Foundations of Business, Certificate

Specific Program Requirements

Course	Title	Credits
ACCT 101	Accounting for Non-Business Majors	3
ECON 101	Economics for Non-Business Majors	3
BSAD 102	Introduction to Personal Finance	3
MGMT 201	Principles of Management	3
MKTG 201	Introduction to Marketing	3
MGMT 214	Introduction to Entrepreneurial Concepts	3
Total Credits		**18**

Health Sciences General Concentration 3+2 Plan, Integrated Bachelor of Science/Master of Business Administration: Healthcare Administration Concentration

The 3+2 program is unique. It allows qualified students to earn both a Bachelor's degree in Health Sciences, and an MBA Healthcare Administration concurrently. A student can use up to 12 credits of elective from the BS degree in Health Sciences for MBA courses once he/she has been admitted into the program. A student who earns two "C" or lower 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.

Students who complete part of the integrated degree plan but decide to opt out of the MBA program and continue towards earning **only** the undergraduate degree can use the MBA courses toward the undergraduate degree but cannot later use them to pursue the MBA degree.

Why pursue a career in health care administration?

A health care administrator (also known as a medical or health services manager) is tasked with overseeing the operations of health care providers. Whether at a doctor's office, hospital, senior care facility, or outpatient clinic, the health care administrator coordinates the business activities of the facility or department. As a successful health care administrator, you'll use your business skills and knowledge of health care policy to make a big impact on your facility (and the patients who come to seek care). In addition to several universal skills (empathy, communication, organization, leadership, critical thinking), you can set yourself up for a thriving career by understanding:

- Budgeting: Deliver quality health care while meeting financial goals.
- Patient care: Understand best practices to help improve the patient experience.
- Health law and policy : Keep up with the latest legal changes to ensure your facility operates legally.
- Software: Billing and coding software, as well as electronic record systems, help keep records and bookkeeping organized.

Working as a health care administrator gives you the power to change lives by ensuring the best possible patient experience. Through your work

as a health care administrator, you have the opportunity to positively affect hundreds if not thousands of people. You can have an impact from behind the scenes, without needing a medical degree or direct patient care experience.

Specific Admission Requirements

Admission to the BS in Health Sciences

There are no specific admission requirements for the BS in Health Sciences.

Admission to the MBA 3+2

The undergraduate GPA must be based on a minimum of at least 60 semester hours of course work including:

- ACCT 201 Principles of Financial Accounting Management (3 c.h.),
- ECON 202 Principles of Microeconomics (3 c.h.),
- FIN 330 Principles of Finance (3 c.h.),
- MATH 156 or EPER 343 Statistics or Research and Statistics (3 c.h.),
- MGMT 201 Principles of Management (3 c.h.),
- MKTG 340 Principles of Marketing (3 c.h.).
- Student must take BSAD 510 (1 c.h.) in the first semester after they are admitted to the 3+2 program.
- Students must have a minimum GPA of 3.5 to be admitted to the MBA.
- The GMAT is not required.

Once the student has completed all of the pre-requisite courses, has at least 60 credit hours and has attained a 3.5 GPA , The student should meet with the MBA Director to complete a graduate admission application. After admission to the MBA program, student will be accepted into the 3+2 program.

NOTE: Students are strongly encouraged to complete HS 498 prior to enrolling in graduate-level courses. Students are strongly encouraged to meet with an advisor in the School of Business to discuss their admissions options.

Student Learning Outcomes

The Student Learning Outcomes for the BS in Health Science are as follows:

1. Summarize and synthesize information relevant to assessing and improving population health and healthcare issues;
2. Exhibit the ability to read and interpret scientific research with application of the scientific methods, statistics, study design, and reporting in the health sciences;
3. Evaluate and integrate critical concepts and skills acquired in the health sciences curriculum to common professional problems in the health science fields of interest;
4. Exhibit effective oral and written communication as well as mass communication regarding subjects related to the health sciences in an individual and group setting;
5. Apply and demonstrate knowledge, skills and critical problems solving in a field-based and/or clinical setting;

The Student Learning Outcomes for the MBA are as follows:

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.

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.

Assurance of Learning

1. 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:
2. **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.
3. **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.
4. 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.

Specific Program Requirements

The Integrated BS-General Health Science/MBA-Healthcare Administration degree plan has the following requirements:

Course	Title	Credits
General Education		35
BS General Health Science and minor/electives		73
MBA Requirements		36
Total Credits		**144**

General Education Requirements

Course	Title	Credits
BIOL 223 & 223L	Human Physiology and Anatomy I (GT-SC2) and Human Physiology and Anatomy I Lab (GT-SC1)	4
BIOL 224 & 224L	Human Physiology and Anatomy II (GT-SC2) and Human Physiology and Anatomy II Lab (GT-SC1)	4
CID 103	Speaking & Listening	3

MATH 156	Introduction to Statistics (GT-MA1)	3
PSYC 151	Human Development (GT-SS3)	3
English		6
History		3
Humanities		6
Social Science		3
Total Credits		**35**

Undergraduate Requirements

Specific Concentration Requirements

Course	Title	Credits
CIS 103	Introduction to PowerPoint	1
CIS 104	Introduction to Excel Spreadsheets	1
EPER 162	Personal Health	3
EPER 162L	Personal Health Lab	1
ACCT 201	Principles of Financial Accounting	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
HS 230	Foundations of Public Health	3
HS 330	Epidemiology & Disease Prevention	3
EPER 343	Research and Statistics	3
HS 493	Seminar	2
HS 498	Internship	6
Choose 15 credits from the following list		**15**
EPER 461	Managing Events & Programs	3
HS 312	Nutrition & Food Systems in Public Health	3
HS 320	Evaluation of Health Issues	3
HS 325	Health Communication	3
HS 335	Public Health and the Environment	3
HS 336	Community and Global Health	3
HS 402	Grant Writing & Community Partnerships	3
HS 430	Public Health Program Planning	3
HS 435	Public Health Program Evaluation	3
HS 491	Special Topics	1-6
HS 492	Research	1-6
HS 494	Field Experience	1-12
HS 495	Independent Study	1-6
PSYC 362	Abnormal Psychology	3
SOC 315	Health, Culture, and Society	3
Courses Outside the Major Take the following credits to get a minor in business or take MGMT 201, ECON 202, FIN 330, MKTG 340, and 9 additional credits.		**21**
ACCT 202	Principles of Managerial Accounting	3
ECON 202	Principles of Microeconomics (GT-SS1)	3
FIN 330	Principles of Finance	3
MGMT 201	Principles of Management	3
MKTG 340	Principles of Marketing	3
Electives		6
Total Credits		**65**

MBA Requirements

Course	Title	Credits
ACCT 510	Managerial Accounting	3
BSAD 510	Academic Writing for MBA Students	1
BSAD 575	International Business	3
CIS 565	Management Information Systems	3
FIN 530	Financial Management	3
ECON 510	Economics for Managers	3
MGMT 511	Production/Operations Management	3
MGMT 585	Management Policy & Strategy	3
NSG 505	Biostatistics & Research	3
NSG 548	Healthcare: Ethics, Law & Policy	3
NSG 716	Health Care Business & Finance	4
NSG 718	Organizational & Systems Leadership	4
Total Credits		**36**

Jake Jabs Certificate in Professional Entrepreneurship

Specific Program Requirements

Course	Title	Credits
BSAD 101	Business-Careers and Opportunities	1
BSAD 102	Introduction to Personal Finance	3
MGMT 201	Principles of Management	3
MGMT 214	Introduction to Entrepreneurial Concepts	3
MGMT 314	Socially Responsible & Sustainable Enterprises	3
Total Credits		**13**

In addition to the course requirements above students must also complete and document four advisor approved co-curricular requirements including the following (must be approved in advance by the Jake Jabs Certificate Advisor and documented in the student portfolio):

- Professional Experience, e.g. internship, small business consulting, employment, mentorship;
- Campus Involvement, e.g. athletics, music, student government, clubs;
- Community Involvement, e.g. 200 hours of community service;
- Respectful Perspective, e.g. National/International Exchange or like experience.

Marketing, Bachelor of Science in Business Administration

Specific Admission Requirements

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. The Hasan School of Business prerequisite course requirement is a D, so that a student may progress to the next course. All business majors are required to earn a C or better in Business Core courses and in 300/400-level major courses to fulfill degree requirements. In addition, students must have completed the

100/200-level Business Core courses prior to enrolling in 300/400-level business courses. Additional prerequisites for Business Core courses and major courses are specified in the Course Descriptions section of the catalog. Business Core courses are listed alphabetically by prefix. Academic Planning Sheets are available in HSB. Independent Studies, Directed Studies, Internships, and Special Projects will not be substituted for core or required courses. They may count as electives. Business Core Courses Titles Credits

An overall GPA of 2.000 is required in General Education Skills Component courses. The Hasan School of Business prerequisite course requirement is a D, so that a student may progress to the next course. All business majors are required to earn a C or better in Business Core courses and in 300/400-level major courses to fulfill degree requirements. In addition, students must have completed the 100/200-level business courses. Additional prerequisites for Business Core courses and major courses are specified in the Course Description section of the catalog. Business Core courses are listed alphabetically by prefix. Academic Planning Sheets are available in HSB.

Specific Program Requirements

The BSBA Marketing program has the following requirements:

Course	Title	Credits
General Education		29
Business Core		51
Marketing Concentration		24
Open Electives	Can be compromised of any course(s) offered.	16
Total Credits		**120**

Specific Core Requirements

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
BSAD 101	Business-Careers and Opportunities	1
BSAD 265	Inferential Statistics & Problem Solving	3
BSAD 270	Business Communications	3
BSAD 302	Ethics in Business	3
BSAD 360	Advanced Business Statistics	3
BSAD 493	Senior Seminar	1
CIS 250	Introduction to Business Analytics	3
ECON 201	Principles of Macroeconomics (GT-SS1)	3
ECON 202	Principles of Microeconomics (GT-SS1)	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 Credits		**51**

Specific Concentration Requirements

Course	Title	Credits
CIS 365	Management Information Systems	3
MKTG 441	Marketing Strategies	3
Elective	15 credits must be Marketing course. 3 credits must be Business course.	18
Total Credits		**24**

Specific Graduation Requirements

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. The Hasan School of Business prerequisite course requirement is a D, so that a student may progress to the next course. All business majors are required to earn a C or better in Business Core courses and 300/400-level major courses to fulfill degree requirements.

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. “In residence” courses will include Business or CIS courses offered through CSU Pueblo Extended Studies Programs. Students who complete junior- and senior-level courses at other colleges or universities with grades of C- or better, and wish to apply the credits earned toward their degree, must request approval through the Dean or Faculty Chair. Courses taken without such approval will not be counted toward the fulfillment of degree requirements.

Only the Dean or the Faculty Chair may waive any portion of these requirements and only upon written petition by a student who has demonstrated extraordinary ability.

Transfer Students

Undergraduate transfer work from other institutions is evaluated first by the Registrar’s Office, 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.

Marketing, Minor

Specific Program Requirements

(Open to Accounting, Economics, & non-management majors only)

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
ECON 202	Principles of Microeconomics (GT-SS1)	3
MGMT 201	Principles of Management	3
MKTG 340	Principles of Marketing	3
MKTG 3/400	Marketing Electives	9
Total Credits		**21**

NSA-Designated Institution Certificate in Cyber Security Defense

The designation of CSU Pueblo as a National Security Agency, Center for Academic Excellence (NSA-CAE) in Cyber Defense Education allows us to offer the Designated Institution Certificate in Cyber Security Defense for CSU Pueblo students who complete the curriculum courses. Students interested in this certificate program should contact the CIS department for further information.

Program of Study Learning Outcomes

After successfully completing the curriculum, students will possess the following skills:

1. Demonstrate the ability to understand and recognize the nature and range of Cyber Threats, Exploits, Attacks
2. Demonstrate appropriate analysis and application of Cyber Defense (CD) tools and methodologies to address and defend organizations and Information Systems (I.S.) from cyber attacks
3. Understand the best application of Info Security Models, Cyber Sec Planning and Policies to analyze, integrate appropriate cyber security methodologies into viable solutions
4. As a team project member, the ability to develop and communicate Threat-Vulnerability-Asset (TVA) grids and IT solutions for cyber attack and vulnerability risk analysis
5. Demonstrate the ability to develop Disaster Recovery, Business Continuity and Risk Mitigation Strategies and solutions within financial, ethical and cyber Law boundaries

Specific Program Requirements

Course	Title	Credits
CIS 171	Introduction to Java Programming	4
or CIS 271	Advanced Program Design with Java	
CIS 289	Network Concepts	3
CIS 315	Linux Fundamentals	3
CIS 350	Database Management	3
or CIS 359	ADVANCED PROGRAMMING WITH C#	
CIS 401	Network Systems Administration	3
CIS 460	Cyber Security & Defense	3
CIS 461	IT Security Risk Management	3
CIS 462	Computer Forensics	3
BSAD 265	Inferential Statistics & Problem Solving	3
or BSAD 360	Advanced Business Statistics	
Total Credits		**28**

Supervisory Management, Minor

Specific Program Requirements

(Open to non-management majors only)

Course	Title	Credits
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 202	Principles of Microeconomics (GT-SS1)	3
MGMT 201	Principles of Management	3
MGMT 301	Organizational Behavior	3
MGMT 318	Human Resource Management	3
MGMT 410	Labor Management Relations	3
Total Credits		**21**

A GPA of 2.000 or higher is required for the minors.

Technology & Computing Instruction, Post-Baccalaureate Certificate

Specific Program Requirements

Students will receive a Technology and Computing Instruction Certificate after completing the following 18 credits:

Course	Title	Credits
Complete two of the following ED courses with grades of C or better		
ED 520	Educational Media and Technology	3
ED 523	Teaching & Managing Technology	3
ED 532	Hardware & Networking for Educators	3
Other relevant courses as approved by Associate Dean		
Complete four of the following CIS courses with grades of C or better		
CIS 510	Data Analytics with Python	3
CIS 550	Advanced Data Analytics	3
CIS 560	CYBER SECURITY & DEFENSE	3
CIS 561	IT SECURITY MANAGEMENT	3
CIS 562	Computer Forensics	3
CIS 565	Management Information Systems	3

SCHOOL OF NURSING

The School of Nursing provides a unique environment for learning. Whether your focus is health promotion and wellness or illness care and disease prevention our programs can lead you to careers as a professional to positively impact health care.

The School of Nursing awards three degrees with multiple concentrations:

The Doctor of Nursing Practice (DNP) concentrations:

- Adult/Gerontology Acute Care Nurse Practitioner (AGACNP)
- Adult/Gerontology Acute Care/Family Nurse Practitioner (AGACNP/FNP)
- Psychiatric-Mental Health Nurse Practitioner (PMHNP)
- MS (Nursing) to DNP Population Health

The Master (MS) of Nursing concentrations:

- Adult/Gerontology Acute Care Nurse Practitioner (AGACNP)
- Adult/Gerontology Acute Care/Family Nurse Practitioner (AGACNP/FNP)
- Psychiatric-Mental Health Nurse Practitioner (PMHNP)
- Nurse Educator

*All graduate concentrations can be completed with a Post MS Certificate

A Bachelor of Science in Nursing (BSN). The BSN can be completed through:

- The basic (traditional) program
- The accelerated program (those with a previous non-nursing baccalaureate degree)
- The RN (ADN) to BSN or MS online program

School of Nursing Mission

The mission of the School of Nursing is to prepare graduates for professional positions as safe, competent and caring nurses to meet the healthcare needs of diverse populations.

School of Nursing Goals

The School 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.

National Accreditation

The Baccalaureate nursing program at Colorado State University Pueblo located in Pueblo, Colorado is accredited by the:

> Accreditation Commission for Education in Nursing (ACEN)
> 3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326
> (404) 975-5000
>
> The most recent accreditation decision made by the ACEN Board of Commissioners for the Baccalaureate nursing program is Continuing Accreditation. –View the public information disclosed by the ACEN regarding this program at http://www.acenursing.us/accreditedprograms/programSearch.htm

The Masters/Post Master's Certificate nursing program at Colorado State University Pueblo located in Pueblo, Colorado is accredited by the:

> Accreditation Commission for Education in Nursing (ACEN)
> 3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326
> (404) 975-5000
>
> The most recent accreditation decision made by the ACEN Board of Commissioners for the Masters/Post Master's Certificate nursing program is Continuing Accreditation. –View the public information disclosed by the ACEN regarding this program at http://www.acenursing.us/accreditedprograms/programSearch.htm

The Clinical Doctorate nursing program at Colorado State University Pueblo located in Pueblo, Colorado is accredited by the:

> Accreditation Commission for Education in Nursing (ACEN)
> 3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326
> (404) 975-5000
>
> The most recent accreditation decision made by the ACEN Board of Commissioners for the Clinical Doctorate nursing program is Initial Accreditation. –View the public information disclosed by the ACEN regarding this program at http://www.acenursing.us/accreditedprograms/programSearch.htm

State Board Approval

The CSU Pueblo School of Nursing baccalaureate educational program is fully approved by the Colorado State Board of Nursing. The Colorado State Board of Nursing does not approve graduate programs.

Colorado Community College System or Compact State Dual Enrollment/ADN to BSN

BSN courses may be taken concurrently while enrolled in a Colorado compact state or a Colorado Community College System ADN program. In addition, pre-requisite courses may be taken while concurrently enrolled. Upon receiving RN licensure and completion of all BSN courses students are eligible for escrow credits through articulation.

Academic Programs

Undergraduate Programs

- Nursing, Bachelor of Science in Nursing (p. 550)

3+2

- Nursing: Nurse Educator Concentration, Joint Bachelor of Science/ Master of Science (p. 563)

Graduate Programs

- Nursing: Adult/Gerontology Acute Care Nurse Practitioner Concentration, Master of Science (p. 556)
- Nursing: Adult/Gerontology Acute Care/Family Nurse Practitioner Concentration, Master of Science (p. 561)
- Nursing: Nurse Educator Concentration, Master of Science (p. 565)
- Nursing: Nurse Manager & Leader Concentration, Master of Science (p. 566)
- Nursing: Psychiatric-Mental Health Nurse Practitioner Concentration, Master of Science (p. 570)

Post-Masters Certificates

- Nurse Educator, Post Masters Certification (p. 549)
- Nurse Educator, Post-Baccalaureate Certificate (p. 550)
- Nursing: Adult/Gerontology Acute Care Nurse Practitioner, Post Masters Certification (p. 558)
- Nursing: Adult/Gerontology Acute Care/Family Nurse Practitioner, Post Masters Certification (p. 562)
- Nursing: Psychiatric-Mental Health Nurse Practitioner, Post Masters Certification (p. 571)

Doctorate Programs

- Nursing: Adult/Gerontology Acute Care Nurse Practitioner Concentration, Doctor of Nursing Practice (p. 555)
- Nursing: Adult/Gerontology Acute Care/Family Nurse Practitioner Concentration, Doctor of Nursing Practice (p. 559)
- Nursing: Population Health Concentration, Doctor of Nursing Practice (p. 567)
- Nursing: Psychiatric-Mental Health Nurse Practitioner Concentration, Doctor of Nursing Practice (p. 568)

Nursing (NSG)

Undergraduate Courses

NSG 207 Nursing Pathophysiology 3(3-0)
Fall, Spring.
Introduces basic disease processes of individual body systems. Incorporates nursing assessment/diagnosis with associated intersystem diseases utilizing evidence-based practice and patient-centered, safe care.
Prerequisite: BIOL 223 and BIOL 223L and BIOL 224 and BIOL 224L.
Corequisite: None.
Registration Information: None.

NSG 230 (WS 230) Women, Health, & Society 3(3-0)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 231 Concepts for Professional Nursing 2(2-0)
Spring, Summer.
Introduces nursing history, theory, and key concepts related to healthcare and professional integrity and leadership.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. Follow nursing program option catalog sequence.

NSG 232 Fundamentals of Nursing Care 3(3-0)
Spring, Summer.
Utilizes the nursing process to provide safe, patient-centered care. Emphasizes teamwork, collaboration, evidence-based practice, and quality improvement.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. Follow nursing program option catalog sequence.

NSG 232L Fundamentals of Nursing Care Lab 3.5(0-7)
Spring, Summer.
Application of NSG 232. Assists students to develop fundamental competencies to provide safe, evidenced-based, patient-centered care.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 232 and NSG 232L simultaneous enrollment. NSG 232L must be completed within 6 months of completion of NSG 232. If student fails NSG 232 or NSG 232L, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 232S Fundamentals of Nursing Care Sim 0.5(0-1)
Spring, Summer.
Application of NSG 232/232L. Assist students to develop fundamentals competencies to provide safe, evidenced-based patient-centered care in a simulated environment. Follow nursing program catalog sequence.
Prerequisite: None.
Corequisite: NSG 232 and NSG 232L.
Registration Information: Restricted to nursing major. NSG 232 and NSG 232S simultaneous enrollment. NSG 232S must be completed within 6 months of completion of NSG 232. If student fails NSG 232 or NSG 32S, not required to repeat both courses if within State Board of Nursing time limits.

NSG 291 Special Topics (1-4 V)
As Needed.
Topics and/or nursing skills for enrichment of required nursing courses, and which serve the interest of student, will be considered.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

NSG 295 Independent Study (1-6 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

NSG 302 Health Promotion and Assessment 2(2-0)
Spring, Summer.
Utilizes evidence-based practice to assess, analyze and promote health in diverse populations across the lifespan.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing or general health science major. Follow nursing program option catalog sequence.

NSG 302L Health Promotion and Assessment Lab 1(0-2)
Spring, Summer.
Fosters evidence-based practice and clinical judgment to develop comprehensive assessment skills across the lifespan.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing or general health science major. Follow nursing program option catalog sequence.

NSG 308 Pharmacology in Nursing Practice 3(3-0)
Spring, Summer.
Applies pharmacokinetics, pharmacodynamics, and pharmacotherapeutics to patient-centered care. Focuses on safety, legal implications and evidence-based practice.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing or general health science major.

NSG 309 Professional Nursing Practice 4(4-0)
As Needed.
Introduces registered nurses to mission and philosophy of the nursing program, professional nursing practice and personal growth. Utilizes concepts of evidence-based, patient-centered care.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to RN to BSN or MS nursing major.

NSG 311 Integration of QSEN for Nurses 3(3-0)
As Needed.
Apply QSEN skills, attitudes, knowledge to improve health care delivery. Identify concepts of quality improvement based on evidence. Survey teamwork/communication /collaboration and transitions of care.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to RN to BSN or MS nursing major.

NSG 312 Caring for Childbearing Family 3(3-0)
Fall, Spring.
Introduces safe, patient-centered care of the neonate and procreative family during the peri-natal period. Includes health promotion, high risk management, safety and human sexuality.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. Follow nursing program option catalog sequence.

NSG 312L Caring for Childbearing Family Lab 2.5(0-5)
Fall, Spring.
Application of NSG 312. Provides evidence-based, patient-centered care to the neonate and family throughout the peri-natal period.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 312 simultaneous enrollment. NSG 312L must be completed within 6 months of completion of NSG 312. If student fails NSG 312 or NSG 312L, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 312S NSG Care Childbearing Family Sim 0.5(0-1)
Fall, Spring.
Application of NSG 312/312L. Provides evidence-based, patient-centered care to neonates and childbearing families based upon best practices, in a simulated environment.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 312 simultaneous enrollment. NSG 312S must be completed within 6 months of completion of NSG 312. If student fails NSG 312 or NSG 312S, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 322 Caring for Adults I 4(4-0)
Fall, Spring.
Integrates assessment, pharmacology and pathophysiologic concepts utilizing evidence-based practice to provide safe, patient-centered care to adults with acute and chronic health concerns.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. Follow nursing program option catalog sequence.

NSG 322L Caring for Adults I Lab 3.5(0-7)
Fall, Spring.
Application of NSG 322. Provides evidence-based, patient-centered care to adults and families based upon best practices.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 322 simultaneous enrollment. NSG 322L must be completed within 6 months of completion of NSG 322. If student fails NSG 322 or NSG 322L, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 322S Caring for Adults I Simulation 0.5(0-1)
Fall, Spring.
Application of NSG 322/322L. Provides evidence-based, patient-centered care to adults and families based upon best practices, in a simulated environment.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 322 simultaneous enrollment. NSG 322S must be completed within 6 months of completion of NSG 322. If student fails NSG 322 or NSG 322S, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 331 Healthy Aging 2(2-0)
Spring, Summer.
Utilizes evidence-based practice theories to promote healthy aging and patient-centered care of older adults.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing or general health sciences major. Follow nursing program option catalog sequence.

NSG 332 Caring for Children/Families 3(3-0)
Fall, Spring.
Introduces patient-centered care of children, adolescents and their families. Emphasizes evidence-based practice related to health promotion, safety and disease management.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. Follow nursing program option catalog sequence.

NSG 332L Caring for Children/Families Lab 2.5(0-5)
Fall, Spring.
Application of NSG 332. Provides evidence-based, patient-centered care of children, adolescents, and families.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 332 simultaneous enrollment. NSG 332L must be completed within 6 months of completion of NSG 332. If student fails NSG 332 or NSG 332L, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 332S Caring for Children/Families Sim 0.5(0-1)
Fall, Spring.
Application of NSG 332/332L. Provides evidence-based, patient-centered care to children, adolescents and their families based upon best practices, in a simulated environment.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 332 simultaneous enrollment. NSG 332S must be completed within 6 months of completion of NSG 332. If student fails NSG 332 or NSG 332S, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 351 Evidence Based Nursing Practice 3(3-0)
As Needed.
Critically analyzes and applies nursing research to practice. Uses evidence-based practice to promote continuous quality improvement and patient-centered care.
Prerequisite: MATH 156.
Corequisite: None.
Registration Information: Restricted to nursing. RN to BSN or general health science major.

NSG 371 Healthcare Informatics 2(2-0)
As Needed.
Introduces theory, infrastructure and ethical application of health informatics for the delivery of safe, effective, efficient, and quality patient-centered care.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing. RN to BSN or general health science major.

NSG 372 Clinical Practicum I 3(0-9)
Summer.
Provides an opportunity for a concentrated clinical practicum with instructor approval.
Prerequisite: NSG 308 and NSG 312 and NSG 322 and NSG 331 and NSG 332 and NSG 351 and NSG 371 and NSG 382.
Corequisite: None.
Registration Information: Restricted to nursing major. Grade of B or better is required in prerequisite courses. Repeatable (6).

NSG 382 Dynamics of Behavioral Health 3(3-0)
Fall, Spring.
Introduces evidence-based concepts focusing on mental health promotion and disease specific patient-centered care.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. Follow nursing program option catalog sequence.

NSG 382L Dynamics of Behavioral Health Lab 2.5(0-5)
Fall, Spring.
Application of NSG 382. Provides evidence-based, patient-centered care in behavioral health settings.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 382 simultaneous enrollment. NSG 382L must be completed within 6 months of completion of NSG 382. If student fails NSG 332 or NSG 332L, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 382S Dynamics of Behavioral Health Sim 0.5(0-1)
Fall, Spring.
Application of NSG 382/382L. Provides evidence-based, patient-centered behavioral health care based upon best practices, in a simulated environment.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 382 simultaneous enrollment. NSG 382S must be completed within 6 months of completion of NSG 382. If student fails NSG 382 or NSG 382S, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 391 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

NSG 408 Synthesis Of Pharm (2 V)
Spring.
Synthesizes pharmacological concepts and prototype agents with focus on the physiological action, effect and utilization of selected drug groups in evidence-based practice.
Prerequisites: NSG 420.
Corequisites: None.
Registration Information: A grade of B or better is required for prerequisite courses.

NSG 420 Caring For Adults II 4(4-0)
Fall, Spring.
Integrates assessment, pharmacology and pathophysiology concepts using evidence-based practice to provide patient-centered care to adults with complex health concerns.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. Follow nursing program option catalog sequence.

NSG 420L Caring for Adults II Lab 3(0-6)
Fall, Spring.
Application of NSG 420. Provides patient centered care to adults and families utilizing evidence-based practice. Emphasizes teamwork and collaboration for multiple patients.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 420 simultaneous enrollment. NSG 420L must be completed within 6 months of completion of NSG 420. If student fails NSG 420 or NSG 420L, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 420S Caring for Adults II Simulation 1(0-2)
Fall, Spring.
Application of NSG 420. Provides simulated patient centered care to adults and families utilizing evidence based practice. Emphasizes teamwork and collaboration for the care of multiple simulated patients.
Prerequisite: None.
Corequisite: NSG 420; NSG 420L.
Registration Information: Restricted to nursing major. NSG 420 simultaneous enrollment. NSG 420S must be completed within 6 months of completion of NSG 420. If student fails NSG 420 or NSG 420S, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 431 Gerontological Nsg (3 V)
As Needed.
Synthesize evidence-based practice theories and integrates concepts of healthy aging to promote patient-centered care of older adults by allied health professionals.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

NSG 442 Global Public Health 3(3-0)
Fall, Summer.
Synthesizes theory, research, epidemiological public health principles into planning interventions to meet the multidimensional health needs of a diverse, global society.
Prerequisite: NSG 351.
Corequisite: None.
Registration Information: Restricted to nursing or general health science major.

NSG 442L Global Public Health Lab 2.5(0-5)
Fall, Summer.
Application of NSG 442. Provides population-focused care in community health settings.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major or general health science major. NSG 442 simultaneous enrollment for nursing major. NSG 442L must be completed within 6 months of completion of NSG 442. If student fails NSG 442 or NSG 442L, not required to repeat both courses if within State Board of Nursing time limits.

NSG 442S Global Public Health Simulation 0.5(0-1)
Fall, Summer.
Application of NSG 442. Provides simulated patient centered care to adults and families utilizing evidence based practice. Emphasizes teamwork and collaboration for the care of multiple simulated patients.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major or general health science major. NSG 442 simultaneous enrollment for nursing major. NSG 442S must be completed within 6 months of completion of NSG 442. If student fails NSG 442 or NSG 442S, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program catalog sequence.

NSG 443 Global Public Health Nursing for RN's 3(3-0)
As Needed.
Synthesizes theory, research, epidemiological and public health principles as applicable to nursing, to plan for and meet the multidimensional health needs of a diverse, global society.
Prerequisite: NSG 351.
Corequisite: NSG 443L.
Registration Information: NSG 443 must be simultaneous or completed. Restricted to RN to BSN nursing major. Follow nursing program option catalog sequence.

NSG 443L Global Public Health Nursing Lab for RN's 3(0-6)
As Needed.
Application of NSG 443. Provides population-focused/family care in community health settings.
Prerequisite: NSG 351.
Corequisite: None.
Registration Information: NSG 443 must be simultaneous or completed. Restricted to RN to BSN nursing major. Follow nursing program option catalog sequence.

NSG 451 Nursing Leadership and Issues 3(3-0)
As Needed.
Analyzes management and leadership theories. Explores issues related to quality improvement, evidence-based practice, professional integrity/leadership and teamwork/collaboration.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing or RN to BSN major. Follow nursing program option catalog sequence.

NSG 452 Synthesis of Nursing Practice 4(4-0)
Spring, Summer.
Prepares for transition into professional nursing practice. Integrates patient-centered care concepts for a variety of health needs across the lifespan.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. Follow nursing program option catalog sequence.

NSG 452L Synthesis of Nursing Practice Lab 4(0-8)
Spring, Summer.
Application of NSG 452. Manages multiple, complex patients in a variety of health care settings utilizing evidence-based practice. Emphasizes integrity, leadership, team work and collaboration.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 452 simultaneous enrollment. NSG 452L must be completed within 6 months of completion of NSG 452. If student fails NSG 442 or NSG 442L, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 452S Synthesis of Nursing Practice Sim 1(0-2)
Spring, Summer.
Application of NSG. 452. Manages multiple, complex simulated patients in the simulation laboratory utilizing evidence-based practice. Emphasizes integrity, leadership, team work and collaboration.
Prerequisite: None.
Corequisite: NSG 452; NSG 452L.
Registration Information: Restricted to nursing major. NSG 452 simultaneous enrollment. NSG 452S must be completed within 6 months of completion of NSG 452. If student fails NSG 452 or NSG 452S, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 453 Synthesis for RN's 4(4-0)
As Needed.
Transitions RN's into professional nursing practice. Integrates QSEN concepts for a variety of health needs across the lifespan.
Prerequisite: NSG 309 and NSG 311 and NSG 351 and NSG 371 and NSG 442 and NSG 451.
Corequisite: NSG 453L.
Registration Information: Restricted to RN to BSN nursing major. RN status required.

NSG 453L Synthesis for RN's Lab 5(0-10)
As Needed.
Applies principles from NSG 453. Emphasizes advocacy, integrity, leadership, and patient centered care in a variety of health care and community settings.
Prerequisite: None.
Corequisite: NSG 453.
Registration Information: Restricted to RN to BSN nursing major. RN status required. NSG 453 must be simultaneous or completed.

NSG 472 Clinical Practicum II 3(0-9)
Spring.
Provides an opportunity for a concentrated clinical specialty practicum with instructor approval.
Prerequisite: NSG 372.
Corequisite: None.
Registration Information: Restricted to nursing major. Repeatable (6).

NSG 491 Special Topics (1-6 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

NSG 492 Research 2(2-0)
As Needed.
Faculty-directed research project for undergraduate student.
Prerequisite: NSG 351.
Corequisite: None.
Registration Information: Grade of B or better required for prerequisite courses.

NSG 495 Independent Study (1-6 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

NSG 504 NSG Writing & Presentation Skills 1(1-0)
Fall.
Prepare students for the rigors of academic writing at the graduate and professional levels.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 505 Biostatistics & Research 3(3-0)
Fall.
Analyze nursing and healthcare research using the most common inferential statistical methodologies to identify accurate data results and evidence gaps.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 506 Roles and Issues 2(2-0)
Fall.
Explores advanced practice nursing roles and competencies emphasizing clinical quality, safety and ethical issues.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 507 Advanced Practice Roles 2(2-0)
Fall.
Introduces the core concepts of the advanced nursing practice role.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 508 Advanced Practice Theory 3(3-0)
Fall.
Examines the theoretical basis of nursing which guides evidence-based advanced nursing practice, research, education, and administration.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 512 Research & Evidenced Based Practice 3(3-0)
Spring.
Expand knowledge to determine the best evidence and quality improvement methods to reduce risk and improve patient outcomes in the advanced nursing practice role.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 548 Healthcare: Ethics, Law & Policy 3(3-0)
Spring.
Evaluate ethical, legal and political concepts in healthcare delivery systems.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 550 Health Policy & Finance 3(3-0)
Spring.
Analyze and utilize the historical, political, economic, and financial concepts in the development in one's practice and the advanced nursing practice role.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 551 Health Promotion 2(2-0)
Spring, Summer.
Analyzes concepts of health promotion related to delivery of evidence-based patient-centered care in advanced nursing practice.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 552 Advanced Pathophysiology 3(3-0)
Fall, Summer.
Examines alterations in human psysiologic function in diverse populations across the lifespan using evidence-based practice principles.
Prerequisite: None.
Corequisite: NSG 561.
Registration Information: None.

NSG 561 Advanced Pharmacology 3(3-0)
Fall, Summer.
Applies pharmacological consepts in the management of patients across the lifespan within the scope of evidence-based advanced nursing practice.
Prerequisite: None.
Corequisite: NSG 552.
Registration Information: None.

NSG 562 Advanced Assessment 2(2-0)
Spring.
Enhances assessment skills across the lifespan within the scope of evidence-based advanced nursing practice.
Prerequisite: None.
Corequisite: NSG 562L.
Registration Information: None.

NSG 562L Advanced Assessment Lab 1(0-2)
Spring.
Demonstrates assessment skills across the lifespan within the scope of evidence-based advanced nursing practice.
Prerequisite: None.
Corequisite: NSG 562.
Registration Information: None.

NSG 570 Advanced Evidenced Based Practice 3(3-0)
Spring.
Utilizes analytical methods and disciplined inquiry to expand knowledge for implementation of a safe and quality evidence-based advanced nursing practice.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 571 Healthcare Informatics 2(2-0)
Fall, Summer.
Analyzes theory, infrastructure and ethical application of health informatics for the delivery of quality advanced nursing practice.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 575 Curriculum Development 3(3-0)
Spring.
Focuses on roles, theories and processes of nursing curriculum development from an evidence-based practice foundation.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 576 Instructional Strategies 3(3-0)
Spring.
Explores evidence-based practice learning theories and instructional strategies for teaching nursing in a variety of settings.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 577 Assessment & Evaluation 3(3-0)
Summer.
Focuses on understanding and applying formal and informal assessment and evaluation strategies utilizing informatics in order to implement data-driven instruction.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 583 Nurse Educator Seminar 1(1-0)
Summer.
Synthesizes nurse educator theory and competencies into evidence-based teaching practices.
Prerequisite: NSG 309 and NSG 311 and NSG 371 and NSG 512 and NSG 575 and NSG 576.
Corequisite: NSG 583L.
Registration Information: Approval of instructor.

NSG 583L Nurse Educator Practicum 3(0-9)
Summer.
Applies nurse educator theory and competencies in a variety of educational settings.
Prerequisite: NSG 309 and NSG 311 and NSG 371 and NSG 512 and NSG 575 and NSG 576 and NSG 577.
Corequisite: NSG 583.
Registration Information: Approval of instructor.

NSG 587 Synthesis Experience 9(3-24)
Fall, Spring, Summer.
Synthesizes theory into practice based on specialty competencies and advanced practice clinical requirements. This course may need to be repeated based on specialization.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 590 Special Projects (1-3 V)
As Needed.
Individual project selected, outlined, and pursued by student.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Advisor approval. Repeatable (99).

NSG 591 Special Topics (1-6 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

NSG 593 Thesis Seminar 3(3-0)
As Needed.
Creates an advanced nursing practice research proposal as the first step in thesis development.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 594 Field Experience 2(0-8)
Fall, Spring, Summer.
Explore the Nurse Manager and Leader competencies in the advanced nursing practice role during a leadership immersion in a healthcare setting.
Prerequisite: None.
Corequisite: None.
Registration Information: Must complete at least 12 credit hours in program prior to enrolling.

NSG 595 Independent Study (1-6 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

NSG 599 Thesis Research (1-6 V)
As Needed.
Preparation of thesis to meet degree requirements. Must be enrolled each semester in at least one credit hour if thesis is still in process.
Prerequisite: NSG 593.
Corequisite: None.
Registration Information: Approval by thesis advisor. Repeatable (99).

Graduate Courses

NSG 610 Diagnostic Reasoning 2(2-0)
Spring, Summer.
Focuses on diagnostic reasoning and problem solving for the advanced practice nurse.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 613L Acute Care Skills Lab I 2(0-4)
Spring.
Explore and practice simulated advanced practice nursing procedure skills for the Adult-Gerontology Acute Care and Family Nurse Practitioner.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 614L Acute Care Skills Lab II 1(0-2)
Summer.
Demonstrate safe simulated advanced practice nursing procedure skills for the Adult-Gerontology Acute Care and Family Nurse Practitioner.
Prerequisite: NSG 613L.
Corequisite: None.
Registration Information: None.

NSG 636L FNP Practicum (1-13 V)
Fall, Spring, Summer.
Engages students in primary care management for the family across the lifespan.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (13).

NSG 641 Adult/ Gerontology Acute Care I 3(3-0)
Summer.
Examines the advanced practice nurse's role in patient-centered care of adult and geriatric populations with chronic health needs.
Prerequisite: NSG 610.
Corequisite: NSG 641L.
Registration Information: None.

NSG 642 Adult/ Gerontology Acute Care II 2(2-0)
Fall.
Examines the advanced practice nurse's role in patient-centered care of adult and geriatric population with decompensating chronic health needs.
Prerequisite: NSG 641.
Corequisite: NSG 642L.
Registration Information: None.

NSG 642L AGACNP Practicum II 4(0-4)
Fall.
Recognizes the advanced practice nurse's role in patient-centered care of adult and geriatric populations.
Prerequisite: None.
Corequisite: NSG 642.
Registration Information: None.

NSG 643 Adult/Gerontology Acute Care III 2(2-0)
Spring.
Examines the advanced practice nurse's role in patient-centered care of adult and geriatric populations with chronic conditions focusing on health maintenance to prevent urgent events.
Prerequisite: NSG 642.
Corequisite: NSG 643L.
Registration Information: None.

NSG 643L AGACNP Practicum III 2(0-6)
Spring.
Applies the advanced practice nurse's role in patient-centered care of adult and geriatric populations.
Prerequisite: None.
Corequisite: NSG 643.
Registration Information: None.

NSG 644 Adult/Gerontology Acute Care IV 2(2-0)
Summer.
Examines the advanced practice nurse's role in patient-centered care of adult and geriatric populations with a focus on chronic urgent/emergent health needs.
Prerequisite: NSG 643.
Corequisite: NSG 644L.
Registration Information: None.

NSG 644L AGACNP Practicum IV 2(0-6)
Summer.
Analyzes the advanced practice nurse's role in patient-centered care of adult and geriatric populations.
Prerequisite: None.
Corequisite: NSG 644.
Registration Information: None.

NSG 645 Adult/Gerontology Acute Care V 1(1-0)
Fall.
Examines the advanced practice nurse's role in patient-centered care of adult and geriatric populations with emergent health needs.
Prerequisite: NSG 644.
Corequisite: NSG 645L.
Registration Information: None.

NSG 645L AGACNP Practicum V 2(0-6)
Fall.
Synthesizes the advanced practice nurse's role in patient-centered care of adult and geriatric populations.
Prerequisite: None.
Corequisite: NSG 645.
Registration Information: None.

NSG 646L AGACNP Practicum MS (1-3 V)
Fall, Spring, Summer.
Synthesizes the advanced practice nurse's role in patient-centered care of adult and geriatric populations.
Prerequisite: NSG 642L.
Corequisite: None.
Registration Information: Masters student only in NSG 643, NSG 644, and NSG 645. Repeatable (3).

NSG 651 Psych Mental Health I 2(2-0)
Fall.
Applies theory and evidenced-based practice to the care of the psychiatric-mental health patient across the lifespan.
Prerequisite: NSG 678.
Corequisite: NSG 651L.
Registration Information: None.

NSG 651L PMH Practicum I 2(0-6)
Fall.
Explores the advanced practice nurse's role while providing evidenced-based patient-centered care of psychiatric-mental health patients across the lifespan.
Prerequisite: None.
Corequisite: NSG 651.
Registration Information: None.

NSG 652 Psych Mental Health II 2(2-0)
Spring.
Analyzes the health care management of the psychiatric-mental health patient disorders across the lifespan utilizing evidence-based guidelines.
Prerequisite: NSG 651.
Corequisite: NSG 652L.
Registration Information: None.

NSG 652L PMH Practicum II 2(0-6)
Spring.
Applies the advanced practice nurse's role while providing evidenced based patient-centered care for psychiatric-mental health patients across the lifespan.
Prerequisite: None.
Corequisite: NSG 652.
Registration Information: None.

NSG 653 Psych Mental Health III 3(3-0)
Summer.
Analyzes complex health care management of the psychiatric-mental health patient disorders across the lifespan utilizing evidence-based guidelines.
Prerequisite: NSG 652.
Corequisite: NSG 653L.
Registration Information: None.

NSG 653L PMH Practicum III 3(0-9)
Summer.
Implements the advanced practice nurse's role while providing evidenced based patient-centered care for psychiatric-mental health patients across the lifespan.
Prerequisite: None.
Corequisite: NSG 653.
Registration Information: None.

NSG 654 Psych Mental Health IV 3(3-0)
Fall.
Synthesizes complex health care management of the psychiatric-mental health patient across the lifespan utilizing evidence-based guidelines.
Prerequisite: NSG 653.
Corequisite: NSG 564L.
Registration Information: None.

NSG 654L PMH Practicum IV 3(0-9)
Fall.
Synthesizes the advanced practice nurse's role while providing evidence-based patient-centered care for psychiatric-mental health patients across the lifespan.
Prerequisite: None.
Corequisite: NSG 654.
Registration Information: None.

NSG 655L PMH Practicum MS (1-3 V)
Fall, Spring, Summer.
Synthesizes the advanced practice nurses role while providing patient-centered care of psychiatric-mental health patients across the lifespan.
Prerequisite: NSG 651 and NSG 651L.
Corequisite: None.
Registration Information: Masters student only in NSG 652, 653, and 654. Repeatable (3).

NSG 661 Family I 2(2-0)
Summer.
Introduces primary care health promotion and disease prevention management for the family across the lifespan.
Prerequisite: NSG 610.
Corequisite: NSG 636L and NSG 641.
Registration Information: None.

NSG 662 Family II 2(2-0)
Fall.
Explores primary care management for families across the lifespan with common urgent and acute health needs.
Prerequisite: NSG 661.
Corequisite: NSG 636L and NSG 642.
Registration Information: None.

NSG 663 Family III 2(2-0)
Spring.
Explores primary care management for families across the lifespan for common post traumatic and chronic health needs.
Prerequisite: NSG 662.
Corequisite: NSG 638L and NSG 643.
Registration Information: None.

NSG 664 Family IV 1(1-0)
Summer.
Explores primary care management for families across the lifespan with complex acute exacerbation of chronic health needs.
Prerequisite: NSG 633.
Corequisite: NSG 636L and NSG 644.
Registration Information: None.

NSG 665 Family V 1(1-0)
Fall.
Synthesize primary care management for families across the lifespan with urgent and emergent rural health needs.
Prerequisite: NSG 664.
Corequisite: NSG 636L and NSG 645.
Registration Information: None.

NSG 676 Theoretical Mental Health Models 2(2-0)
Fall, Spring.
Explores theories and conceptual models which frame psychiatric-mental health interventions.
Prerequisite: None.
Corequiste: None.
Registration Information: None.

NSG 677 Psychopharmacology 2(2-0)
Fall, Spring.
Applies psychopharmacological concepts in the management of psychiatric-mental health patients across the lifespan.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 678 Psychiatric Assessment & Evaluation 2(2-0)
Summer.
Analyzes techniques of assessment and evaluation utilizing standard diagnostic criteria.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 679 Psychiatric Differential Diagnosis 2(2-0)
Summer.
Focuses on diagnostic reasoning and problem solving for the psychiatric-mental health advanced practice nurse.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 688 MS Nurse Manager & Leader Practice Capstone (3 V)
Fall.
Integrate the Nurse Manager and Leader competencies into the advanced nursing practice role during a leadership immersion capstone project in a healthcare setting.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 709L DNP Clinical Gap Hours 1-12(0-3-36)
Fall, Spring, Summer.
Applies advanced nursing practice role competencies through immersion in a clinical practice setting.
Prerequisites: None.
Corequisites: None.
Registration Information: Variable credit course not required for all DNP Population Health students; determined through admission gap analysis. Repeatable (12).

NSG 712 Research & Evidence Based Practice 3(3-0)
Spring.
Expand knowledge to determine the best evidence and quality improvement methods to reduce risk and improve patient outcomes in the advanced nursing practice role.
Prerequisite: NSG 505.
Corequisite: None.
Registration Information: None.

NSG 714 Epidemiology 3(3-0)
Summer.
Examine theoretical and philosophic foundations for illness patterns, injury, and high-risk behaviors in individuals, aggregates, and populations using evidence-based nursing practice to influence health outcomes.
Prerequisite: NSG 505.
Corequisite: None.
Registration Information: None.

NSG 716 Health Care Business & Finance 4(3-3)
Fall.
Introduces the dynamics of financial theory and strategic management for establishing an advanced nursing practice.
Prerequisite: None.
Corequisite: None.
Registration Information: DNP 45 hours clinical required.

NSG 718 Organizational & Systems Leadership 4(3-3)
Spring.
Integrates organizational and systems leadership knowledge and skills to influence communication, productivity, health outcomes and practice excellence.
Prerequisite: None.
Corequisite: None.
Registration Information: DNP 45 hours clinical required.

NSG 748 Healthcare: Ethics, Law & Policy 4(3-3)
Spring.
Evaluate ethical, legal and political concepts in healthcare delivery systems.
Prerequisite: None.
Corequisite: None.
Registration Information: DNP 45 hours clinical required.

NSG 801 Doctor of Nursing Practice Seminar 1(1-0)
Fall, Summer.
Formulate a framework for a Doctoral Inquiry project proposal.
Prerequisite: NSG 505 and NSG 712 and NSG 716 and NSG 718 and NSG 748.
Corequisite: None.
Registration Information: Approval of instructor.

NSG 802 DNP Project Practicum I 3(2-3)
Fall.
Develop and defend scholarly DNP project proposal DNP clinical hours required.
Prerequisite: NSG 801.
Corequisite: None.
Registration Information: None.

NSG 803 DNP Project Practicum II 3(1-6)
Spring.
Develops the role of the DNP during clinical immersion while initiating a DNP project implementation in a designated multidisciplinary emphasis area. DNP clinical hours required.
Prerequisite: NSG 802.
Corequisite: None.
Registration Information: None.

NSG 804 DNP Project Practicum III 2(1-3)
Summer.
Analyze DNP project findings to prepare project defense and maintain clinical immersion. DNP clinical hours required.
Prerequisite: NSG 803.
Corequisite: None.
Registration Information: None.

NSG 805 DNP Project Practicum IV 3(1-6)
Fall.
Defend DNP project and disseminates findings. DNP clinical hours required.
Prerequisite: NSG 804.
Corequisite: None.
Registration Information: None.

NSG 806L Final DNP Practicum AGACNP 6(0-18)
Fall.
Integrate the DNP essentials into the advanced practice nursing role during an adult-gerontology acute care setting.
Prerequisite: NSG 805.
Corequisite: None.
Registration Information: None.

NSG 807L Final DNP Practicum AGACNP/FNP 10(0-30)
Spring.
Integrate the DNP essentials into the advanced practice nursing role during an adult-gerontology acute care and family setting.
Prerequisite: NSG 805.
Corequisite: None.
Registration Information: None.

NSG 808L Final DNP Practicum PMHNP 6(0-18)
Spring.
Integrate the DNP essentials into the advanced practice nursing role during a Psychiatric Mental Health clinical setting.
Prerequisite: NSG 805.
Corequisite: None.
Registration Information: None.

NSG 809L MS NSG DNP Project Practicum (1-16 V)
Fall, Spring, Summer.
Develop, implement, analyze, defend and disseminate findings for a scholarly DNP clinical immersion change project. Develop the DNP role in a multidisciplinary clinical emphasis area.
Prerequisite: NSG 801.
Corequisite: None.
Registration Information: Repeatable (16).

NSG 810L DNP Project Practicum 1(0-3)
Fall, Spring, Summer.
Analyze, defend and disseminate findings for a scholarly DNP clinical immersion change project. Develop the DNP role in a multidisciplinary clinical emphasis area.
Prerequisite: NSG 806L or NSG 807L or NSG 808L or NSG 809L.
Corequisite: None.
Registration Information: Repeatable (3).

Nurse Educator, Post Masters Certification

This program requires an MS in Nursing or higher.

Students seeking post Master's certification or DNP Degree 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. A student must complete a minimum of 16 postgraduate credit hours at CSU Pueblo to be eligible for a post masters certification.

Courses are the same as the Post Bachelor's Certificate, plus the NSG 583 and NSG 583L (135 teaching practicum hours).

Specific Admission Requirements

Students are responsible for following all admission policies and procedures as outlined in the Graduate Studies section of the University catalog.

1. Complete application to the nursing program.
2. Proof of active, unrestricted Colorado or Colorado Nursing Compact State Registered Nurse license for all MS and MS-DNP emphasis options or by the end of the first semester for the BSN-DNP emphases options).
3. Bachelor's degree in Nursing from an accredited university with a 3.0 GPA, or higher (MS, BSN-DNP and associate post-masters certificate options).
4. All prerequisites must be passed with a C or better (C- is not acceptable) including statistics, microbiology and chemistry. Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission.

MS-DNP Program and associated post-masters certificate options. Master's degree in Nursing from an accredited university with a 3.0 GPA, or higher is required.

BSN or MS (Nursing) to DNP or Post Masters Certification

Students are responsible for following all admission policies and procedures as outlined in the *Graduate Studies* section of the University catalog.

1. Baccalaureate degree in nursing from an institution accredited by a regional accreditation agency (or equivalent).

2. Undergraduate BSN cumulative GPA of 3.0 or higher will consider courses with a graduate nursing GPA of 3.0 or higher.
3. Undergraduate statistics course with a grade of C or higher.
4. Application for admission to graduate programs in the university Office of Admission (admission to graduate programs does not constitute admission to the nursing graduate program).
5. Proof of active, unrestricted Colorado Registered Nurse license by the end of the first semester of the program.
6. Background check per Colorado Law (see application).
7. Current immunizations.
8. Current certification in CPR (Health Care Provider – C or equivalent).
9. Three letters of recommendation:
   a. Professional or Academic
   b. Clinical
   c. Other
10. Letter of intent that includes:
    a. Brief professional history
    b. Reason for pursuing advanced degree
    c. How applicant will manage work, home, and study
11. Curriculum Vitae

(Use the template located under *Graduate Nursing Student Application Instructions on the website*)

Preference for acceptance will be given to applicants who have:

1. 2000 Hours (1 year full-time) experience as a registered nurse (AGACNP, AGACNP/FNP and PMHNP emphases only).
2. One year or more of experience as a clinical adjunct instructor (Nurse Educator only)
3. Residency in Southern Colorado
4. Graduate from CSU Pueblo

If accepted into a program, requirements prior to attending first class include:

1. Drug screen
2. Physical exam within last 12 months

Program Outcomes

1. Eighty percent of graduates will:
   - Express satisfaction with the program
   - Pass national certification exam the first time
   - Be employed in role-related professional practice within six months to one year
2. Seventy percent of graduates will complete their program on-time starting from enrollment day one of the first class of their nursing option.
3. Eighty percent of employers' will express satisfaction with graduates' job performance.

The End Of Program Student Learning Outcomes:

1. Integrate evidence-based practice, ethical decision-making and technology into advanced nursing practice.
2. Utilize inter-professional collaboration to provide safe, quality patient-centered care.
3. Explore quality improvement initiatives that affect delivery of advanced practice nursing and health care services.

Specific Program Requirements

Students seeking post masters' certification or DNP Degree 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. A student must complete a minimum of 16 postgraduate credit hours at CSU Pueblo 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. The student's plan is developed based on the academic course work already completed.

Nurse Educator, Post-Baccalaureate Certificate

This program is designed for BSN nurses to further their knowledge and skills for nursing education.

Students can apply these 9 credits to a master's degree at CSU Pueblo nursing.

Specific Program Requirements

This nine (9) credit online certificate program is open to any nurse with a BSN degree or higher who wants further their knowledge and skills for nursing education.

Course	Title	Credits
NSG 575	Curriculum Development	3
NSG 576	Instructional Strategies	3
NSG 577	Assessment & Evaluation	3
Total Credits		**9**

These certificate courses will transfer (six-year time limit) to the CSU Pueblo Master of Science in Nursing with Nurse Educator concentration.

This Nurse Educator Certificate does not prepare graduates to take the Certified Nurse Educator Exam (CNE) offered by the National League for Nursing (NLN).

Nursing, Bachelor of Science in Nursing

The Bachelor of Science in Nursing Program

The Colorado State University Pueblo School of Nursing offers an undergraduate program that confers a Bachelor of Science in Nursing (BSN). The undergraduate program offers several options for the nursing student. 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, or a student enrolled in a Colorado community college ADN program 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.

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 caring and the Quality and Safety Education for Nursing (QSEN) competencies. The Colorado State University Pueblo offers the ideal foundation for the development of the professional nurse.

Registered Nurse to Bachelor of Science in Nursing Option (RN-BSN or RN-MS)

The RN to BSN courses are offered in an online format. Two types of students are eligible to enroll in this option: Those who are licensed RN's and those enrolled in a Colorado community college associate degree nursing program (ADN). A licensed RN includes both an associate degree and a diploma nurse. Those enrolled in the community college have an opportunity to concurrently enroll in the RN to BSN program and begin taking select bachelor level courses. This allows them to move seamlessly from the associate degree program to the bachelor's degree program. These students must pass the NCLEX-RN and be licensed in order to take the final BSN course. A RN to MS option is available for students wanting a BSN and Masters degree. See the RN (ADN) to MS (Nursing-Nurse Educator) concentration in the catalog.

Colorado Community College System or Compact State Dual Enrollment/ADN to BSN

BSN courses may be taken concurrently while enrolled in a Colorado compact state or a Colorado Community College System ADN program. In addition, pre-requisite courses may be taken while concurrently enrolled. Upon receiving RN licensure and completion of all BSN courses students are eligible for escrow credits through articulation.

Degree Plus to Bachelor of Science in Nursing Accelerated (BSN) Option

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.

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.

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 to that option.
- Students must follow their appropriate program option nursing course sequence plan. Exceptions are only by permission of the undergraduate nursing program coordinator.
- All nursing courses with corresponding labs must be completed in the same semester. Exceptions are only by permission of the undergraduate nursing program coordinator.

Licensure Examination

Students must complete all of the Bachelor of Science in Nursing requirements in order to be qualified to sit for the National Certification Licensure Examination.

Specific Admission Requirements

Undergraduate Admission Policies & Procedures

Students are responsible for all undergraduate admissions policies and procedures as outlined in the *Academic Policies* section of this catalog.

The BSN program is very competitive. If a student is not admitted to the BSN program they can complete the BS in Health Science which will prepare them for an accelerated nursing program, entry level Master degree in Nursing or graduate degrees in several other heath science oriented professions such as Public Health, Athletic Training, Nutrition, Physical Therapy, Occupational Therapy, and Healthcare Administration.

Undergraduate Admission Requirements

There are two ways to apply for admission to the Nursing Program.

Admission as a High School Senior to Nursing Program as a Freshman

Slots for admission as a freshman are limited. Admission is not guaranteed as students with the highest GPA's and ACT/SAT scores will have priority selection. Preference is given to students graduating from Southern Colorado high schools and/or Health Academy programs. In order to be admitted directly in to the program as a freshman, students must:

- Demonstrate proof of high school diploma. Students must show proof of 3 years of science, including biology and chemistry and proof of algebra or equivalent.
- Have a cumulative high school GPA of 3.25 or higher on a 4.0 scale.
- Have minimal math scores for enrollment in MATH 156.
- Remain a full-time CSU Pueblo student and maintain a 3.0 cumulative average and 3.0 nursing prerequisite average while taking courses at CSU Pueblo.
- Have prerequisites and general education completed by the start of the second semester sophomore year.

If students do not have these requirements, they will lose their opportunity to progress directly into the nursing program.

Students denied admission as freshman are eligible to apply as second semester sophomores.

Admission as a Second Semester Sophomore from CSU Pueblo or Transfer from an Accredited School

All pre-nursing students will be Health Sciences majors with a pre-nursing concentration. Admission to the University does not imply acceptance to the nursing program. The undergraduate program is very competitive and applicants are assigned an admission score based on their GPA for the general education and prerequisites required by the program

and holistic admission components such as first generation status. Completion of all pre-requisite courses at CSU Pueblo will also be given special consideration for admission. Fifty percent of the prerequisites and general education courses must be completed by the application deadline. Only students admitted to the Nursing or Health Sciences majors are eligible to take nursing courses as indicated in their degree plan. For the basic nursing option student admission:

- Requirements are a minimum GPA of 3.00 for all required general education and prerequisites. All prerequisites must be passed with a C or better (C- is not acceptable) and be completed prior to the term of entrance into the nursing program. Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission. Prerequisite courses may be repeated one (1) time only for admission eligibility.
- All general education must be completed prior to the term of entrance into the nursing program.
- The student needs to be admitted to CSU Pueblo first, and then submit a separate application to the nursing program the year prior to the spring (basic) or summer (accelerated) term they plan to start the program. During the pre-nursing phase of the application process, students will be advised by the pre-nursing advisor.

Students will be notified via email 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 who are residents of another country 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.csupueblo.edu/nursing (http://ceeps.csupueblo.edu/nursing/) or in the nursing department. The completed applications must be submitted to the School of Nursing by the scheduled deadline. Incomplete applications will not be processed. Applicants should contact the School of Nursing with questions regarding applications.

Undergraduate Post Acceptance Requirements

Before a student starts the nursing program they must attend a mandatory orientation.

The following must be submitted through the nursing tracking system after receiving a Net ID number from the University and instructions from the Department of Nursing prior to orientation. Failure to do so by the stated deadline will result in loss of admission status.

- Background check per Colorado Law. (House bill 97-1084).
- A urine drug screen.
- Current certification in CPR (Health Care Provider-C or equivalent).
- Current physical examination within the last year and current immunizations including, hepatitis B series, TB test or two step if necessary, measles, mumps, rubella, influenza, covid-19, tetanus and varicella and/or titers.
- Proof of current health insurance.
- Proof of current nursing student malpractice insurance from organization specified by School of Nursing.

The following must be submitted to the School of Nursing prior to orientation by the stated deadline:

- Current unofficial transcripts showing completion of all prerequisite and general education classes.
- Return receipt for program acceptance.

In order to register for undergraduate nursing courses, students must have unconditional acceptance into the nursing program and follow their option degree plan, or register by permission of the nursing undergraduate program coordinator.

RN-BSN Admissions Requirements

1. Complete application to the nursing program.
2. Proof of active, unrestricted Colorado Registered Nurse license by the end of the first semester of the program. (or current enrollment in a Colorado Community College or a compact state ADN program)
3. Residency in a Colorado Nursing Compact State.
4. All prerequisites must be passed with a C or better (C- is not acceptable) Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission.

Degree Plus to Bachelor of Science in Nursing Accelerated (BSN) Option

Students will be notified by email of their admission status to the program. Those students who are accepted to the program should acknowledge acceptance by return email.

The degree-plus student is expected to meet with the pre-nursing advisor for advisement and plan development. The student must have a cumulative nursing prerequisite GPA of 3.0 and follow all admission and post acceptance requirements set forth in the Basic Nursing Option. Due to the intensity of the curriculum, it is advised that the student not work and be able to attend to their studies full-time. Students must maintain a cumulative nursing 3.00 GPA to progress.

Admission to this option is very competitive and applicants are assigned an admission score based on their GPA for the prerequisites required by the program and holistic admission components such as first generation status. Completion of prior degree at CSU Pueblo will also be given special consideration for admission.

Time Limits

For applicants to all options (except registered nurses), Anatomy & Physiology I & II, Intro to Human Development, and Pathophysiology completed (5) years or more before applying to the nursing program will not be accepted as satisfying the prerequisite requirement.

Undergraduate Program Outcomes

1. Eighty percent of graduates will:
   - Express satisfaction with the program.
   - Pass national licensure exam the first time.
   - Be employed in role related professional practice within six months to one year.
2. Sixty percent of graduates will:
   - complete their program on-time starting from enrollment day one of the first class of their nursing option.

Expected Student Learning Outcomes

- Demonstrate caring through advocacy for patients by providing compassionate care based on respect for patient's preferences, values, and needs.
- Collaborate effectively within health care team, to achieve safe, quality patient care in a variety of health care settings.
- Use nursing judgment based on best current evidence to ensure optimal outcomes for patients and families.
- Demonstrate professional identity, integrity, and leadership as the coordinator of patient care.

Outcome Assessments

The outcome assessments will be evaluated through or by:

- Assessment of clinical competencies through multiple strategies including simulations and clinical evaluation tools.
- Individual and course evaluations.
- Survey of nursing graduates.
- Licensure Examination (NCLEX) first-time pass rates.
- A survey of graduate employment.
- Graduation rates.

Specific Program Requirements

Elective Concentrated Clinical Practicum

The elective concentrated clinical practicum allows the student enrolled in the Basic BSN option to choose an area of clinical concentration during their progression through the program. The student will meet with their advisor and course coordinator to develop their plan. The elective concentrated clinical practicum is not an option for students enrolled in the accelerated BSN option.

Course	Title	Credits
Junior		
Summer		
NSG 372	Clinical Practicum I	3
	Credits	**3**
Senior		
Spring		
NSG 472	Clinical Practicum II	3
	Credits	**3**
	Total Credits	**6**

Basic BSN Option Program Plan

Course	Title	Credits
Freshman		
Fall		
BIOL 223 & 223L	Human Physiology and Anatomy I (GT-SC2) and Human Physiology and Anatomy I Lab (GT-SC1)	4
CID 103	Speaking & Listening	3
ENG 101	Rhetoric & Writing I (GT-CO1)	3
PSYC 151	Human Development (GT-SS3)	3
World Language		3
	Credits	**16**
Spring		
BIOL 224 & 224L	Human Physiology and Anatomy II (GT-SC2) and Human Physiology and Anatomy II Lab (GT-SC1)	4
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CHEM 111	Principles of Chemistry (GT-SC2)	3
CHEM 111L	Principles of Chemistry Lab (GT-SC1)	1
MATH 156	Introduction to Statistics (GT-MA1)	3
	Credits	**14**
Sophomore		
Fall		
BIOL 206 & 206L	Introduction to Microbiology and Introduction to Microbiology Lab	4
NSG 207	Nursing Pathophysiology	3
History [1]		3
Humanities		3
Social Science		3
	Credits	**16**
Spring		
NSG 231	Concepts for Professional Nursing	2
NSG 232 & 232L & 232S	Fundamentals of Nursing Care and Fundamentals of Nursing Care Lab and Fundamentals of Nursing Care Sim	7
NSG 302 & 302L	Health Promotion and Assessment and Health Promotion and Assessment Lab	3
NSG 308	Pharmacology in Nursing Practice	3
	Credits	**15**
Junior		
Fall		
NSG 331	HEALTHY AGING	2
NSG 351	Evidence Based Nursing Practice	3
NSG 382	Dynamics of Behavioral Health	3.00
NSG 382L	Dynamics of Behavioral Health Lab	2.50
NSG 382S	Dynamics of Behavioral Health Sim	0.50
One of the following will be assigned:		6
NSG 312 & 312L & 312S	Caring for Childbearing Family and Caring for Childbearing Family Lab and NSG Care Childbearing Family Sim	
NSG 332 & 332L & 332S	Caring for Children/Families and Caring for Children/Families Lab and Caring for Children/Families Sim	
	Credits	**17**
Spring		
NSG 322 & 322L & 322S	Caring for Adults I and Caring for Adults I Lab and Caring for Adults I Simulation	8
NSG 371	Healthcare Informatics	2.0
One of the following will be assigned:		6
NSG 312 & 312L & 312S	Caring for Childbearing Family and Caring for Childbearing Family Lab and NSG Care Childbearing Family Sim	
NSG 332 & 332L & 332S	Caring for Children/Families and Caring for Children/Families Lab and Caring for Children/Families Sim	
	Credits	**16**
Senior		
Fall		
NSG 420 & 420L & 420S	Caring For Adults II and Caring for Adults II Lab and Caring for Adults II Simulation	8
NSG 442 & 442L & 442S	Global Public Health and Global Public Health Lab and Global Public Health Simulation	6
	Credits	**14**
Spring		
NSG 451	Nursing Leadership and Issues	3
NSG 452 & 452L & 452S	Synthesis of Nursing Practice and Synthesis of Nursing Practice Lab and Synthesis of Nursing Practice Sim	9
	Credits	**12**
	Total Credits	**120**

[1] CID 221 Interpersonal Communication (3 c.h.) will be accepted in lieu of CID 103 Speaking and Listening (3 c.h.) but student must complete additional Gen Ed Humanities
[2] May substitute CHEM 121 General Chemistry I (4.c.h.)/CHEM 121L General Chemistry Lab I (1 c.h.)
[3] Per General Education Requirement

Degree Plus to BSN Accelerated Option

Course	Title	Credits
Summer		
NSG 231	Concepts for Professional Nursing	2
NSG 232 & 232L & 232S	Fundamentals of Nursing Care and Fundamentals of Nursing Care Lab and Fundamentals of Nursing Care Sim	7
NSG 302 & 302L	Health Promotion and Assessment and Health Promotion and Assessment Lab	3
NSG 308	Pharmacology in Nursing Practice	3
NSG 331	HEALTHY AGING	2
Fall		
NSG 312 & 312L & 312S	Caring for Childbearing Family and Caring for Childbearing Family Lab and NSG Care Childbearing Family Sim	6
NSG 322 & 322L & 322S	Caring for Adults I and Caring for Adults I Lab and Caring for Adults I Simulation	8
NSG 332 & 332L & 332S	Caring for Children/Families and Caring for Children/Families Lab and Caring for Children/Families Sim	6
Spring		
NSG 351	Evidence Based Nursing Practice	3
NSG 382 & 382L & 382S	Dynamics of Behavioral Health and Dynamics of Behavioral Health Lab and Dynamics of Behavioral Health Sim	6
NSG 420 & 420L & 420S	Caring For Adults II and Caring for Adults II Lab and Caring for Adults II Simulation	8
NSG 371	Healthcare Informatics	2
Summer		
NSG 442 & 442L & 442S	Global Public Health and Global Public Health Lab and Global Public Health Simulation	6
NSG 451	Nursing Leadership and Issues	3
NSG 452 & 452L & 452S	Synthesis of Nursing Practice and Synthesis of Nursing Practice Lab and Synthesis of Nursing Practice Sim	9
Total Credits		**74**

RN-BSN (Nursing) Degree Requirements (Online Only)

The student must confer with the RN-BSN advisor to develop a program of study. The RN-BSN option will include 33 credit hours through articulation, which will be posted the semester prior to anticipated graduation, 57 credit hours of prerequisite or co-requisite courses and 30 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 3.0 GPA. RNs transferring from community colleges can transfer in 57 prerequisite credits along with 33 RN credits of which 10 are considered upper division for a total of 90 credit hours. This applies only to the students in the RN to BSN option. Students must provide evidence of RN licensure in order to enroll in NSG 453 Synthesis for RN's (4 c.h.) NSG 453L Synthesis for RN's Lab (5 c.h.)

RN-BSN Specific Requirements

Course	Title	Credits
Nursing Transfer/Credits through articulation		33
Prerequisite Courses		
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
BIOL 206 & 206L	Introduction to Microbiology and Introduction to Microbiology Lab	4
BIOL 223 & 223L	Human Physiology and Anatomy I (GT-SC2) and Human Physiology and Anatomy I Lab (GT-SC1)	4
BIOL 224 & 224L	Human Physiology and Anatomy II (GT-SC2) and Human Physiology and Anatomy II Lab (GT-SC1)	4
CHEM 111 & 111L	Principles of Chemistry (GT-SC2) and Principles of Chemistry Lab (GT-SC1) [2]	4
MATH 156	Introduction to Statistics (GT-MA1)	3
PSYC 151	Human Development (GT-SS3)	3.0
History [3]		3
NSG 207	Nursing Pathophysiology	3
World Language [3]		3
Humanities [3]		3
Social Science [3]		3
Elective Credits		11
NSG 309	Professional Nursing Practice	4
NSG 311	Integration of QSEN for Nurses	3
NSG 351	Evidence Based Nursing Practice	3
NSG 371	Healthcare Informatics	2
NSG 451	Nursing Leadership and Issues	3
NSG 443	Global Public Health Nursing for RN's	3
NSG 443L	Global Public Health Nursing Lab for RN's	3
NSG 453 & 453L	Synthesis for RN's and Synthesis for RN's Lab	9
Total Credits		**120**

[1] CID 221 Interpersonal Communication (3 c.h.) will be accepted in lieu of CID 103 Speaking and Listening (3 c.h.) but student must complete additional Gen Ed Humanities
[2] May substitute CHEM 121 General Chemistry I (4 c.h.)/CHEM 121L General Chemistry Lab I (1 c.h.)
[3] Per General Education Requirements

Specific Graduation Requirements

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 or satisfactory (S).

- Complete the program's minimum number of hours of approved nursing course work within five years.

Note: Nursing courses completed five (5) or more years before the date of graduation, either at CSU Pueblo or at some other institution, will not be accepted as satisfying graduation requirements without the approval of the nursing admissions committee.

Nursing: Adult/Gerontology Acute Care Nurse Practitioner Concentration, Doctor of Nursing Practice

AGACNP

This program prepares students to provide evidence-based, safe, quality patient-centered care in a variety of chronic, acute, and emergent care settings. The graduate will be eligible to take the Adult/Gerontology Acute Care Nurse Practitioner certification examination.

Some states require a specific master's degree to practice as a nurse practitioner; therefore, a concurrent Master of Science with a major in Nursing will be awarded with completion of the DNP.

The School of Nursing also offers the post graduate certificate for DNP-prepared nurses. The plan of study is individualized based on academic completion and requirements using a gap analysis evaluation.

School of Nursing Mission

The mission of the School of Nursing is to prepare graduates for professional positions as safe, competent, and caring nurses to meet the health care needs of diverse populations.

Acceptance of Transfer Credits

Transfer credit will be awarded per the published Graduate Programs section of the University catalog. A maximum of nine semester hours of transfer credits from an accredited institution may be applied to the degree with approval from the graduate nursing program director.

Time Limits

Courses completed 6 or more years before the date of graduation will not be accepted as satisfying graduation requirements without the approval by the graduate nursing program director.

Specific Admission Requirements

Students are responsible for following all admission policies and procedures as outlined in the Graduate Studies section of the University catalog.

1. Complete application to the nursing program.
2. Proof of active, unrestricted Colorado or Colorado Nursing Compact State Registered Nurse license for all MS and MS-DNP emphasis options or by the end of the first semester for the BSN-DNP emphases options).
3. Bachelor's degree in Nursing from an accredited university with a 3.0 GPA, or higher (MS, BSN-DNP and associate post-masters certificate options).
4. All prerequisites must be passed with a C or better (C- is not acceptable) including statistics, microbiology and chemistry. Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission.

MS-DNP Program and associated post-masters certificate options. Master's degree in Nursing from an accredited university with a 3.0 GPA or higher is required.

Program Outcomes

1. Eighty percent of graduates will:
   - Express satisfaction with the program
   - Pass national certification exam the first time
   - Be employed in role-related professional practice within six months to one year
2. Seventy percent of graduates will complete their program on-time starting from enrollment day one of the first class of their nursing option.
3. Eighty percent of employers' will express satisfaction with graduates' job performance.

DNP Graduate Student Learning Outcomes

At the completion of this program, graduates will be able to:

1. Integrate evidence-based practice, ethical decision making and technology into advanced nursing practice
2. Conduct scholarly inquiry to influence health outcomes of individuals, aggregates and populations
3. Organize interprofessional collaboration to provide safe, quality patient-centered care.
4. Assume a leadership role in transforming health care systems, policies and standards of care

Specific Program Requirements

Course	Title	Credits
Year 1		
Fall		
NSG 504	NSG Writing & Presentation Skills	1
NSG 505	Biostatistics & Research	3
NSG 507	Advanced Practice Roles	2
NSG 508	Advanced Practice Theory	3
	Credits	**9**
Spring		
NSG 562	Advanced Assessment	2
NSG 562L	Advanced Assessment Lab	1
NSG 748	Healthcare: Ethics, Law & Policy	4
NSG 712	Research & Evidence Based Practice	3
	Credits	**10**
Summer		
NSG 551	Health Promotion	2
NSG 571	Healthcare Informatics	2
NSG 714	Epidemiology	3
	Credits	**7**
Year 2		
Fall		
NSG 552	Advanced Pathophysiology	3
NSG 561	Advanced Pharmacology	3
NSG 716	Health Care Business & Finance	4
	Credits	**10**

Spring		
NSG 610	Diagnostic Reasoning	2
NSG 613L	Acute Care Skills Lab I	2
NSG 718	Organizational & Systems Leadership	4
	Credits	**8**
Summer		
NSG 614L	Acute Care Skills Lab II	1
NSG 641	Adult/ Gerontology Acute Care I	3
NSG 801	Doctor of Nursing Practice Seminar	1
	Credits	**5**
Year 3		
Fall		
NSG 642	Adult/ Gerontology Acute Care II	2
NSG 642L	AGACNP Practicum II	4
NSG 802	DNP Project Practicum I	3
	Credits	**9**
Spring		
NSG 643	Adult/Gerontology Acute Care III	2
NSG 643L	AGACNP Practicum III	2
NSG 803	DNP Project Practicum II	3
	Credits	**7**
Summer		
NSG 644	Adult/Gerontology Acute Care IV	2
NSG 644L	AGACNP Practicum IV	2
NSG 804	DNP Project Practicum III	2
	Credits	**6**
Year 4		
Fall		
NSG 645	Adult/Gerontology Acute Care V	1
NSG 645L	AGACNP Practicum V	2
NSG 805	DNP Project Practicum IV	3
	Credits	**6**
Spring		
NSG 806L	Final DNP Practicum AGACNP [3 Cr AGACNP, 3 Cr DNP]	6
	Credits	**6**
Optional		
NSG 810L	DNP Project Practicum	(1)
	Credits	**0**
	Total Credits	**83**

Practicum Hours

Course	Title	Credits
Total Lab Hours		120
Total AGACNP Practicum Semester Hours		780
Total DNP Practicum Hours		540
Total Practicum Hours		**1320**

All courses and number of credits for practicum must be completed in sequence following the program curriculum plan.

NSG 810L is not a required course. Students enroll in NSG 810L if they meet and receive an incomplete grade in NSG 806L to meet university continuous enrollment requirement.

NSG 646L AGACNP Practicum MS (1-3 cr.) is a variable credit course. This program requires a total of 3 cr. and 10 cr. in other AGACNP practicum for a total of 13 cr. MS students complete NSG 646L 1- credit each semester with other AGACNP practicum courses over the final 3 semesters of the program.

Students admitted prior to Fall 2024: program requires 585 hours in AGACNP practicum.

Students admitted starting Fall 2024 need to complete 780 hours in AGACNP practicum.

Specific Graduation Requirements

The graduate degree will be granted to candidates who meet all of the University catalog requirements plus the following:

1. Graduate cumulative GPA of 3.0 or better.
2. All courses must be passed with a B or better.
3. Complete the university requirements for a master's degree.
4. Complete an approved DNP Project.

Nursing: Adult/Gerontology Acute Care Nurse Practitioner Concentration, Master of Science

AGACNP

This program prepares students to provide evidence-based, safe, quality patient-centered care in a variety of chronic, acute, and emergent care settings. The graduate will be eligible to take the Adult/Gerontology Acute Care Nurse Practitioner certification examination.

School of Nursing Mission

The mission of the School of Nursing is to prepare graduates for professional positions as safe, competent, and caring nurses to meet the health care needs of diverse populations.

Acceptance of Transfer Credits

Transfer credit will be awarded per the published Graduate Programs section of the University catalog. A maximum of nine semester hours of transfer credits from an accredited institution may be applied to the degree with approval from the graduate nursing program director.

Time Limits

Courses completed 6 or more years before the date of graduation will not be accepted as satisfying graduation requirements without the approval by the graduate nursing program director.

Specific Admission Requirements

Students are responsible for following all admission policies and procedures as outlined in the Graduate Studies section of the University catalog.

1. Complete application to the nursing program.
2. Proof of active, unrestricted Colorado or Colorado Nursing Compact State Registered Nurse license for all MS and MS-DNP emphasis options or by the end of the first semester for the BSN-DNP emphases options).
3. Bachelor's degree in Nursing from an accredited university with a 3.0 GPA, or higher (MS, BSN-DNP and associate post-masters certificate options).
4. All prerequisites must be passed with a C or better (C- is not acceptable) including statistics, microbiology and chemistry.

Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission.

MS-DNP Program and associated post-masters certificate options. Master's degree in Nursing from an accredited university with a 3.0 GPA, or higher is required.

Program Outcomes

1. Eighty percent of graduates will:
   - Express satisfaction with the program
   - Pass national certification exam the first time
   - Be employed in role-related professional practice within six months to one year
2. Seventy percent of graduates will complete their program on-time starting from enrollment day one of the first class of their nursing option.
3. Eighty percent of employers' will express satisfaction with graduates' job performance.

Expected Student Learning Outcomes for Masters Programs

At the completion of the program, graduates will be able to:

1. Integrate evidence-based practice, ethical decision making and technology into advanced nursing practice.
2. Utilize interprofessional collaboration to provide safe, quality patient-centered care.
3. Explore quality improvement initiatives that affect delivery of advanced nursing practice and health care services.

Specific Program Requirements

Course	Title	Credits
Year 1		
Fall		
NSG 504	NSG Writing & Presentation Skills	1
NSG 506	Roles and Issues	2
NSG 508	Advanced Practice Theory	3
NSG 552	Advanced Pathophysiology	3
NSG 561	Advanced Pharmacology	3
	Credits	**12**
Spring		
NSG 512	Research & Evidenced Based Practice	3
NSG 562	Advanced Assessment	2
NSG 562L	Advanced Assessment Lab	1
NSG 610	Diagnostic Reasoning	2
NSG 613L	Acute Care Skills Lab I	2
	Credits	**10**
Summer		
NSG 551	Health Promotion	2
NSG 571	Healthcare Informatics	2
NSG 614L	Acute Care Skills Lab II	1
NSG 641	Adult/ Gerontology Acute Care I	3
	Credits	**8**
Year 2		
Fall		
NSG 642	Adult/ Gerontology Acute Care II	2
NSG 642L	AGACNP Practicum II	4
	Credits	**6**
Spring		
NSG 548	Healthcare: Ethics, Law & Policy	3
NSG 643	Adult/Gerontology Acute Care III	2
NSG 643L	AGACNP Practicum III	2
NSG 646L	AGACNP Practicum MS	1-3
	Credits	**8-10**
Summer		
NSG 644	Adult/Gerontology Acute Care IV	2
NSG 644L	AGACNP Practicum IV	2
NSG 646L	AGACNP Practicum MS	1-3
	Credits	**5-7**
Year 3		
Fall		
NSG 645	Adult/Gerontology Acute Care V	1
NSG 645L	AGACNP Practicum V	2
NSG 646L	AGACNP Practicum MS	1-3
	Credits	**4-6**
	Total Credits	**53-59**

Course	Title	Credits
Optional Courses		
NSG 505	Biostatistics & Research	3
NSG 575	Curriculum Development	3
NSG 576	Instructional Strategies	3
NSG 577	Assessment & Evaluation	3
NSG 593	Thesis Seminar	3
NSG 599	Thesis Research	3-6

Practicum Hours

Course	Title	Credits
Total Lab Hours		120
Total AGACNP Clinical Semester Hours	Changing practicum credit hour ratio from 1:45 to 1:60	780
Optional Elective Hours		0-21
Total Practicum Hours		**900-921**

All courses and number of credits for practicum must be completed in sequence following the program curriculum plan.

NSG 646L AGACNP Practicum MS (1-3 cr.) is a variable credit course. This program requires a total of 3 cr. and 10 cr. in other AGACNP practicum for a total of 13 cr. MS students complete NSG 646L 1- credit each semester with other AGACNP practicum courses over the final 3 semesters of the program.

Students admitted prior to Fall 2024: program requires 585 hours in AGACNP practicum.

Students admitted starting Fall 2024 need to complete 780 hours in AGACNP practicum.

All students must successfully pass Oral Comprehensive Exam (OCE) to meet concentration competency requirements or Thesis is optional (6-9 cr.).

Specific Graduation Requirements

The graduate degree will be granted to candidates who meet all of the University catalog requirements plus the following:

1. Graduate cumulative GPA of 3.0 or better.
2. All courses must be passed with a B or better.
3. Completed oral comprehensive exam or directed research or thesis. If choosing to complete a directed research project or thesis you will need to contact the Graduate Nursing Program Coordinator by the end of your second semester.

Nursing: Adult/Gerontology Acute Care Nurse Practitioner, Post Masters Certification

Post MS AGACNP Certificate

The School of Nursing offers the post masters certificate for MS, MSN or doctorate prepared nurses. The plan of study is individualized based on academic completion and requirements using a gap analysis evaluation. This program prepares students to provide evidence-based, safe, quality patient-centered care in a variety of chronic, acute, and emergent care settings. The graduate will be eligible to take the Adult/Gerontology Acute Care Nurse Practitioner certification examination.

Specific Admission Requirements

Students are responsible for following all admission policies and procedures as outlined in the Graduate Studies section of the University catalog.

1. Complete application to the nursing program.
2. Proof of active, unrestricted Colorado or Colorado Nursing Compact State Registered Nurse license for all MS and MS-DNP emphasis options or by the end of the first semester for the BSN-DNP emphases options).
3. Bachelor's degree in Nursing from an accredited university with a 3.0 GPA, or higher (MS, BSN-DNP and associate post-masters certificate options).
4. All prerequisites must be passed with a C or better (C- is not acceptable) including statistics, microbiology and chemistry. Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission.

MS-DNP Program and associated post-masters certificate options. Master's degree in Nursing from an accredited university with a 3.0 GPA, or higher is required.

BSN or MS (Nursing) to DNP or Post Masters Certificate

Students are responsible for following all admission policies and procedures as outlined in the *Graduate Programs* section of the University catalog.

1. Baccalaureate degree in nursing from an institution accredited by a regional accreditation agency (or equivalent).
2. Undergraduate BSN cumulative GPA of 3.0 or higher will consider courses with a graduate nursing GPA of 3.0 or higher.
3. Undergraduate statistics course with a grade of C or higher.
4. Application for admission to graduate programs in the university Office of Admission (admission to graduate programs does not constitute admission to the nursing graduate program).
5. Proof of active, unrestricted Colorado Registered Nurse license by the end of the first semester of the program.
6. Background check per Colorado Law (see application).
7. Current immunizations.
8. Current certification in CPR (Health Care Provider – C or equivalent).
9. Three letters of recommendation:
    a. Professional or Academic
    b. Clinical
    c. Other
10. Letter of intent that includes:
    a. Brief professional history
    b. Reason for pursuing advanced degree
    c. How applicant will manage work, home, and study
11. Curriculum Vitae

(Use the template located under *Graduate Nursing Student Application Instructions on the website*)

Preference for acceptance will be given to applicants who have:

1. 2000 Hours (1 year full-time) experience as a registered nurse (AGACNP, AGACNP/FNP and PMHNP emphases only).
2. One year or more of experience as a clinical adjunct instructor (Nurse Educator only)
3. Residency in Southern Colorado
4. Graduate from CSU-Pueblo

If accepted into a program, requirements prior to attending first class include:

1. Drug screen
2. Physical exam within last 12 months

Program Outcomes

1. Eighty percent of graduates will:
    - Express satisfaction with the program
    - Pass national certification exam the first time
    - Be employed in role-related professional practice within six months to one year
2. Seventy percent of graduates will complete their program on-time starting from enrollment day one of the first class of their nursing option.
3. Eighty percent of employers' will express satisfaction with graduates' job performance.

Expected Student Learning Outcomes for Masters Programs

At the completion of the program, graduates will be able to:

1. Integrate evidence-based practice, ethical decision making and technology into advanced nursing practice.
2. Utilize interprofessional collaboration to provide safe, quality patient-centered care.
3. Explore quality improvement initiatives that affect delivery of advanced nursing practice and health care services.

Specific Program Requirements

Students seeking post masters' certificate or DNP Degree 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. A student must complete a minimum of 16 postgraduate credit hours at CSU-Pueblo to be eligible for a post masters certificate. Core courses must be completed to meet the mandates of the Colorado State Board of Nursing for Advanced Nursing Practice. A total of 585 clinical hours must be documented for each nurse practitioner emphasis. The student's plan is developed based on the academic course work already completed.

Minimum Required Courses

Course	Title	Credits
NSG 613L	Acute Care Skills Lab I	2
NSG 614L	Acute Care Skills Lab II	1
NSG 641	Adult/ Gerontology Acute Care I	3
NSG 642	Adult/ Gerontology Acute Care II	2
NSG 642L	AGACNP Practicum II	4
NSG 643	Adult/Gerontology Acute Care III	2
NSG 643L	AGACNP Practicum III	2
NSG 644	Adult/Gerontology Acute Care IV	2
NSG 644L	AGACNP Practicum IV	2
NSG 645	Adult/Gerontology Acute Care V	1
NSG 645L	AGACNP Practicum V	2
NSG 646L	AGACNP Practicum MS	1-3
Total Credits		**24-26**

Nursing: Adult/Gerontology Acute Care/Family Nurse Practitioner Concentration, Doctor of Nursing Practice

AGACNP/FNP

This program prepares students to provide evidence-based, safe, quality patient-centered care in a variety of chronic, acute, and emergent care settings. Students will also be prepared for primary care practice across the lifespan. The graduate will be eligible to take the Adult/Gerontology Acute Care Nurse Practitioner certification examination and Family Nurse Practitioner certification examination.

Some states require a specific master's degree to practice as a nurse practitioner; therefore, a concurrent Master of Science with a major in Nursing will be awarded with completion of the DNP.

The School of Nursing also offers the post graduate certificate for DNP-prepared nurses. The plan of study is individualized based on academic completion and requirements using a gap analysis evaluation.

School of Nursing Mission

The mission of the School of Nursing is to prepare graduates for professional positions as safe, competent, and caring nurses to meet the health care needs of diverse populations.

Acceptance of Transfer Credits

Transfer credit will be awarded per the published Graduate Programs section of the University catalog. A maximum of nine semester hours of transfer credits from an accredited institution may be applied to the degree with approval from the graduate nursing program coordinator.

Time Limits

Courses completed 6 or more years before the date of graduation will not be accepted as satisfying graduation requirements without the approval by the graduate nursing program coordinator.

Specific Admission Requirements

Students are responsible for following all admission policies and procedures as outlined in the Graduate Studies section of the University catalog.

1. Complete application to the nursing program.
2. Proof of active, unrestricted Colorado or Colorado Nursing Compact State Registered Nurse license for all MS and MS-DNP emphasis options or by the end of the first semester for the BSN-DNP emphases options).
3. Bachelor's degree in Nursing from an accredited university with a 3.0 GPA, or higher (MS, BSN-DNP and associate post-masters certificate options).
4. All prerequisites must be passed with a C or better (C- is not acceptable) including statistics, microbiology and chemistry. Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission.

MS-DNP Program and associated post-masters certificate options. Master's degree in Nursing from an accredited university with a 3.0 GPA, or higher is required.

Program Outcomes

1. Eighty percent of graduates will:
   - Express satisfaction with the program
   - Pass national certification exam the first time
   - Be employed in role-related professional practice within six months to one year
2. Seventy percent of graduates will complete their program on-time starting from enrollment day one of the first class of their nursing option.
3. Eighty percent of employers' will express satisfaction with graduates' job performance.

DNP Graduate Student Learning Outcomes

At the completion of this program, graduates will be able to:

1. Integrate evidence-based practice, ethical decision making and technology into advanced nursing practice
2. Conduct scholarly inquiry to influence health outcomes of individuals, aggregates and populations
3. Organize interprofessional collaboration to provide safe, quality patient-centered care.
4. Assume a leadership role in transforming health care systems, policies and standards of care

Specific Program Requirements

Course	Title	Credits
Year 1		
Fall		
NSG 504	NSG Writing & Presentation Skills	1
NSG 505	Biostatistics & Research	3
NSG 507	Advanced Practice Roles	2
NSG 508	Advanced Practice Theory	3
	Credits	**9**
Spring		
NSG 562	Advanced Assessment	2
NSG 562L	Advanced Assessment Lab	1
NSG 748	Healthcare: Ethics, Law & Policy	4
NSG 712	Research & Evidence Based Practice	3
	Credits	**10**
Summer		
NSG 551	Health Promotion	2
NSG 571	Healthcare Informatics	2
NSG 714	Epidemiology	3
	Credits	**7**
Year 2		
Fall		
NSG 552	Advanced Pathophysiology	3
NSG 561	Advanced Pharmacology	3
NSG 716	Health Care Business & Finance	4
	Credits	**10**
Spring		
NSG 610	Diagnostic Reasoning	2
NSG 613L	Acute Care Skills Lab I	2
NSG 718	Organizational & Systems Leadership	4
	Credits	**8**
Summer		
NSG 614L	Acute Care Skills Lab II	1
NSG 641	Adult/ Gerontology Acute Care I	3
NSG 661	Family I	2
NSG 801	Doctor of Nursing Practice Seminar	1
	Credits	**7**
Year 3		
Fall		
NSG 642	Adult/ Gerontology Acute Care II	2
NSG 642L	AGACNP Practicum II	4
NSG 662	Family II	2
NSG 636L	FNP Practicum [1]	2
NSG 802	DNP Project Practicum I	3
	Credits	**13**
Spring		
NSG 643	Adult/Gerontology Acute Care III	2
NSG 643L	AGACNP Practicum III	2
NSG 663	Family III	2
NSG 636L	FNP Practicum [1]	3
NSG 803	DNP Project Practicum II	3
	Credits	**12**
Summer		
NSG 644	Adult/Gerontology Acute Care IV	2
NSG 644L	AGACNP Practicum IV	2
NSG 664	Family IV	1
NSG 636L	FNP Practicum [1]	2
NSG 804	DNP Project Practicum III	2
	Credits	**9**
Year 4		
Fall		
NSG 645	Adult/Gerontology Acute Care V	1
NSG 645L	AGACNP Practicum V	2
NSG 665	Family V	1
NSG 636L	FNP Practicum [1]	2
NSG 805	DNP Project Practicum IV	3
	Credits	**9**
Spring		
NSG 807L	Final DNP Practicum AGACNP/FNP (4 Cr FNP, 3 Cr AGACNP, 3 Cr DNP)	10
	Credits	**10**
Optional		
NSG 810L	DNP Project Practicum	(1)
	Credits	**0**
	Total Credits	**104**

Practicum Hours

Course	Title	Credits
Total Lab Hours		120
Total AGACNP Practicum Hours		780
Total FNP Practicum Hours		780
Total DNP Practicum Hours		540
Total Practicum Hours		**2100**

All courses and number of credits for practicum must be completed in sequence following the program curriculum plan.

NSG 810L is not a required course. Students enroll if they meet and receive an incomplete grade in NSG 807L to meet university continuous enrollment requirement.

NSG 646L AGACNP Practicum MS (1-3 cr.) is a variable credit course. This program requires a total of 3 cr. and 10 cr. in other AGACNP practicum for a total of 13 cr. MS students complete NSG 646L 1- credit each semester with other AGACNP practicum courses over the final 3 semesters of the program.

NSG 636L FNP Practicum (1-13 cr.) is a variable credit course. This program requires a total of 13 credits FNP Practicum. Students complete the number of credits each semester in sequence following the curriculum plan. Students can request delayed graduation during the program enrolling in a minimum of 1 cr. each semester completing FNP didactic courses completing remaining required hours over 1-3 semesters.

Students admitted prior to Fall 2024: program requires 585 hours in AGACNP practicum and 585 hours in FNP practicum.

Students admitted starting Fall 2024 need to complete 780 hours in AGACNP practicum and 780 hours in FNP Practicum.

Specific Graduation Requirements

The graduate degree will be granted to candidates who meet all of the University catalog requirements plus the following:

1. Graduate cumulative GPA of 3.0 or better.
2. All courses must be passed with a B or better.
3. Complete the university requirements for a master's degree.
4. Complete an approved DNP Project.

Nursing: Adult/Gerontology Acute Care/Family Nurse Practitioner Concentration, Master of Science

AGACNP/FNP

This program prepares students to provide evidence-based, safe, quality patient-centered care in a variety of chronic, acute, and emergent care settings. Students will also be prepared for primary care practice across the lifespan. The graduate will be eligible to take the Adult/Gerontology Acute Care Nurse Practitioner certification examination and Family Nurse Practitioner certification examination.

School of Nursing Mission

The mission of the School of Nursing is to prepare graduates for professional positions as safe, competent, and caring nurses to meet the health care needs of diverse populations.

Acceptance of Transfer Credits

Transfer credit will be awarded per the published Graduate Programs section of the University catalog. A maximum of nine semester hours of transfer credits from an accredited institution may be applied to the degree with approval from the graduate nursing program coordinator.

Time Limits

Courses completed 6 or more years before the date of graduation will not be accepted as satisfying graduation requirements without the approval by the graduate nursing program coordinator.

Specific Admission Requirements

Students are responsible for following all admission policies and procedures as outlined in the Graduate Studies section of the University catalog.

1. Complete application to the nursing program.
2. Proof of active, unrestricted Colorado or Colorado Nursing Compact State Registered Nurse license for all MS and MS-DNP emphasis options or by the end of the first semester for the BSN-DNP emphases options).
3. Bachelor's degree in Nursing from an accredited university with a 3.0 GPA, or higher (MS, BSN-DNP and associate post-masters certificate options).
4. All prerequisites must be passed with a C or better (C- is not acceptable) including statistics, microbiology and chemistry. Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission.

MS-DNP Program and associated post-masters certificate options. Master's degree in Nursing from an accredited university with a 3.0 GPA, or higher is required.

Program Outcomes

1. Eighty percent of graduates will:
   - Express satisfaction with the program
   - Pass national certification exam the first time
   - Be employed in role-related professional practice within six months to one year
2. Seventy percent of graduates will complete their program on-time starting from enrollment day one of the first class of their nursing option.
3. Eighty percent of employers' will express satisfaction with graduates' job performance.

Expected Student Learning Outcomes for Masters Programs

At the completion of the program, graduates will be able to:

1. Integrate evidence-based practice, ethical decision making and technology into advanced nursing practice.
2. Utilize interprofessional collaboration to provide safe, quality patient-centered care.
3. Explore quality improvement initiatives that affect delivery of advanced nursing practice and health care services.

Specific Program Requirements

Course	Title	Credits
Year 1		
Fall		
NSG 504	NSG Writing & Presentation Skills	1
NSG 506	Roles and Issues	2
NSG 508	Advanced Practice Theory	3
NSG 552	Advanced Pathophysiology	3
NSG 561	Advanced Pharmacology	3
	Credits	**12**
Spring		
NSG 512	Research & Evidenced Based Practice	3
NSG 562	Advanced Assessment	2
NSG 562L	Advanced Assessment Lab	1
NSG 610	Diagnostic Reasoning	2
NSG 613L	Acute Care Skills Lab I	2
	Credits	**10**
Summer		
NSG 551	Health Promotion	2
NSG 571	Healthcare Informatics	2
NSG 614L	Acute Care Skills Lab II	1
NSG 641	Adult/ Gerontology Acute Care I	3
NSG 661	Family I	2
	Credits	**10**
Year 2		
Fall		
NSG 642	Adult/ Gerontology Acute Care II	2
NSG 642L	AGACNP Practicum II	4
NSG 662	Family II	2
NSG 636L	FNP Practicum	3
	Credits	**11**
Spring		
NSG 548	Healthcare: Ethics, Law & Policy	3
NSG 643	Adult/Gerontology Acute Care III	2
NSG 643L	AGACNP Practicum III	2
NSG 646L	AGACNP Practicum MS	1-3
NSG 663	Family III	2
NSG 636L	FNP Practicum	3
	Credits	**13-15**
Summer		
NSG 644	Adult/Gerontology Acute Care IV	2
NSG 644L	AGACNP Practicum IV	2
NSG 646L	AGACNP Practicum MS	1-3

NSG 664	Family IV	1
NSG 636L	FNP Practicum	3
	Credits	**9-11**
Year 3		
Fall		
NSG 645	Adult/Gerontology Acute Care V	1
NSG 645L	AGACNP Practicum V	2
NSG 646L	AGACNP Practicum MS	1-3
NSG 665	Family V	1
NSG 636L	FNP Practicum	4
	Credits	**9-11**
	Total Credits	**74-80**

Course	Title	Credits
Optional Courses		
NSG 505	Biostatistics & Research	3
NSG 575	Curriculum Development	3
NSG 576	Instructional Strategies	3
NSG 577	Assessment & Evaluation	3
NSG 593	Thesis Seminar	3
NSG 599	Thesis Research	3-6

Practicum Hours

Course	Title	Credits
Total Required Family Clinical Hours		780
Total AGACNP Clinical Hours		780
Total Lab Hours		120
Optional Elective		0-21
Total Practicum Hours		**1680-1701**

All courses and number of credits for practicum must be completed in sequence following the program curriculum plan.

NSG 646L AGACNP Practicum MS (1-3 cr.) is a variable credit course. This program requires a total of 3 cr. and 10 cr. in other AGACNP practicum for a total of 13 cr. MS students complete NSG 646L 1- credit each semester with other AGACNP practicum courses over the final 3 semesters of the program.

NSG 636L FNP Practicum (1-13 cr.) is a variable credit course. This program requires a total of 13 credits FNP Practicum. Students complete the number of credits each semester in sequence following the curriculum plan. Students can request delayed graduation during the program enrolling in a minimum of 1 cr. each semester completing FNP didactic courses completing remaining required hours over 1-3 semesters.

Students admitted prior to Fall 2024: program requires 585 hours in AGACNP practicum and 585 hours in FNP practicum.

Students admitted starting Fall 2024 need to complete 780 hours in AGACNP practicum and 780 hours in FNP Practicum.

All students must successfully pass an oral comprehensive exam to meet concentration competency requirements or Thesis is optional (6-9 cr.).

Specific Graduation Requirements

The graduate degree will be granted to candidates who meet all of the University catalog requirements plus the following:

1. Graduate cumulative GPA of 3.0 or better.
2. All courses must be passed with a B or better.
3. Completed oral comprehensive exam or directed research or thesis. If choosing to complete a directed research project or thesis you will need to contact the Graduate Nursing Program Coordinator by the end of your second semester.

Nursing: Adult/Gerontology Acute Care/Family Nurse Practitioner, Post Masters Certification

AGACNP/FNP

This program prepares students to provide evidence-based, safe, quality patient-centered care in a variety of chronic, acute, and emergent care settings. Students will also be prepared for primary care practice across the lifespan. The graduate will be eligible to take the Adult/Gerontology Acute Care Nurse Practitioner certification examination and Family Nurse Practitioner certification examination.

Specific Admission Requirements

Students are responsible for following all admission policies and procedures as outlined in the Graduate Studies section of the University catalog.

1. Complete application to the nursing program.
2. Proof of active, unrestricted Colorado or Colorado Nursing Compact State Registered Nurse license for all MS and MS-DNP emphasis options or by the end of the first semester for the BSN-DNP emphases options).
3. Bachelor's degree in Nursing from an accredited university with a 3.0 GPA, or higher (MS, BSN-DNP and associate post-masters certificate options).
4. All prerequisites must be passed with a C or better (C- is not acceptable) including statistics, microbiology and chemistry. Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission.

MS-DNP Program and associated post-masters certificate options. Master's degree in Nursing from an accredited university with a 3.0 GPA, or higher is required.

Post Masters Certificate

Students are responsible for following all admission policies and procedures as outlined in the *Graduate Programs* section of the University catalog.

1. Master's degree in nursing from an institution accredited by a regional accreditation agency (or equivalent).
2. Master's in nursing degree cumulative GPA of 3.0, or higher.
3. Undergraduate statistics course, equivalent to Math 156 with a grade of C or higher.
4. Undergraduate chemistry course, equivalent to Chemistry 111 with a grade of C or higher.
5. Undergraduate Microbiology, equivalent to Biology 206 and 206L course with a grade of C or higher.
6. Application for admission to graduate programs for AGACNP/FNP Post Master's Certificate in the university Office of Admission (admission to the university does not constitute admission to the

nursing graduate program). Current degree seeking student, contact admissions for assistance to apply for a second major.

7. Proof of active, unrestricted Colorado or multi-state Registered Nurse license
8. Three references with two minimum Professional (Academic and/or Clinical)
9. Professional Letter of intent/ Personal Statement that includes:
   a. Name, Credentials, and Date
   b. Brief professional history
   c. Reason for pursuing advanced degree and concentration listed on application
   d. How applicant will manage work, home, and study
10. Curriculum Vitae

Preference for acceptance based on availability will be given to applicants who have:

1. 2000 Hours (1 year full-time) RN experience and/ or as a Nurse Practitioner
2. Residency in Southern Colorado
3. Graduate from CSU Pueblo
4. Complete Application before preference deadline

If accepted into a program, requirements prior to attending first class and maintained as current throughout the program include:

Review the SON website C*astlebranch Instructions on the SON website for specific concentration requirements including but not limited to:*

1. Background check per Colorado Law (minimum annual renewal, some clinical sites may require more frequent checks)
2. Current immunizations
3. Current certification in CPR (Health Care Provider – C or equivalent)
4. Current certification in ACLS and PALS
5. Drug screen (minimum annual renewal, some clinical sites may require more frequent checks)
6. Physical exam within last 12 months

Program Outcomes

1. Eighty percent of graduates will:
   - Express satisfaction with the program
   - Pass national certification exam the first time
   - Be employed in role-related professional practice within six months to one year
2. Seventy percent of graduates will complete their program on-time starting from enrollment day one of the first class of their nursing option.
3. Eighty percent of employers' will express satisfaction with graduates' job performance.

Expected Student Learning Outcomes for Masters Programs

At the completion of the program, graduates will be able to:

1. Integrate evidence-based practice, ethical decision making and technology into advanced nursing practice.
2. Utilize interprofessional collaboration to provide safe, quality patient-centered care.
3. Explore quality improvement initiatives that affect delivery of advanced nursing practice and health care services.

Specific Program Requirements

Students seeking post masters' certificate or DNP Degree 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. A student must complete a minimum of 16 postgraduate credit hours at CSU Pueblo to be eligible for a post masters certificate. Core courses must be completed to meet the mandates of the Colorado State Board of Nursing for Advanced Nursing Practice. A total of 585 clinical hours must be documented for each nurse practitioner concentration. The student's plan is developed based on the academic course work already completed.

Minimum Required Courses

See masters AGACNP/FNP for complete curriculum requirements.

Course	Title	Credits
NSG 613L	Acute Care Skills Lab I	2
NSG 614L	Acute Care Skills Lab II	1
NSG 636L	FNP Practicum	13
NSG 641	Adult/ Gerontology Acute Care I	3
NSG 642	Adult/ Gerontology Acute Care II	2
NSG 642L	AGACNP Practicum II	4
NSG 643	Adult/Gerontology Acute Care III	2
NSG 643L	AGACNP Practicum III	2
NSG 644	Adult/Gerontology Acute Care IV	2
NSG 644L	AGACNP Practicum IV	2
NSG 645	Adult/Gerontology Acute Care V	1
NSG 645L	AGACNP Practicum V	2
NSG 646L	AGACNP Practicum MS	3
NSG 661	Family I	2
NSG 662	Family II	2
NSG 663	Family III	2
NSG 664	Family IV	1
NSG 665	Family V	1
Total Credits		**47**

Nursing: Nurse Educator Concentration, Joint Bachelor of Science/Master of Science

The School of Nursing offers the Master of Science degree with a major in nursing concentration Nurse Educator. Master's-prepared nurses may complete a post graduate certificate in the nurse educator concentration. This program prepares the nurse to practice as faculty in colleges, universities, hospital -based schools of nursing or technical schools, or as staff development educators in health care facilities. Nurse educators serve as role models and provide leadership needed to implement evidence-based practice. These leaders document the outcomes of educational programs and guide students through the learning process. The shortage of nurse educators may enhance career prospects since it affords job security and provides opportunities for nurses to maintain dual roles as educators and direct patient care providers. The graduate will be eligible to take the National League for Nursing Certified Nurse

Educator Examination. Master's-prepared nurses may complete a post graduate certificate in the nurse educator concentration. The following courses are required.

RN (ADN) to MS (Nursing-Nurse Educator) Concentration

Associate degree RNs may apply for a continuous pathway to receive the BSN and the MS (Nursing) in the Nurse Educator concentration. Students who have completed all of the BSN prerequisites can complete their bachelor's and master's degree in 48 credits.

The RN to MS courses are offered in an online format. Two types of students are eligible to enroll in this option: those who are licensed RN's and those enrolled in a Colorado community college associate degree nursing program (ADN).

A licensed RN includes both an associate degree and a diploma nurse.

Those enrolled in the community college have an opportunity to concurrently enroll in the RN to MS program and begin taking select bachelor and master level courses.

This allows them to move seamlessly from the associate degree program through the bachelor's and master's degree program. These students must pass the NCLEX-RN and be licensed in order to take the remaining master's courses.

Colorado Community College System or Compact State Dual Enrollment/ADN to BSN

BSN courses may be taken concurrently while enrolled in a Colorado compact state or a Colorado Community College System ADN program. In addition, pre-requisite courses may be taken while concurrently enrolled. Upon receiving RN licensure and completion of all BSN and MS courses students are eligible for escrow credits through articulation.

Specific Admission Requirements

Students are responsible for following all admission policies and procedures as outlined in the Graduate Studies section of the University catalog.

1. Complete application to the nursing program.
2. Proof of active, unrestricted Colorado Registered Nurse license or current enrollment in a Colorado Community College or a compact state ADN program
3. Residency in a Colorado Nursing Compact State.
4. All prerequisites must be passed with a C or better (C- is not acceptable) including statistics, microbiology and chemistry. Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission.

If accepted into a program, CastleBranch requirements must be completed by the end of the first class semester. These requirements include the following:

1. CV/Resume
2. Drug screen
3. Background check per Colorado law
4. Physical exam within the last 12 months
5. NSO student malpractice insurance
6. Current immunizations
7. Current certification in CPR (Health Care Provider - C or equivalent)
8. Nursing Program Enrollment Agreement
9. CSU Pueblo Consent Forms
10. Major/concentration specific requirements

Specific Program Requirements

The student must confer with the RN-MS (Nursing) advisor to develop a degree plan. The RN-MS option will include 33 escrow credit hours (see the Academic Policies section of the catalog), which will be posted the semester prior to anticipated graduation, 57 credit hours of prerequisite or co-requisite courses and 48 credit hours of nursing and approved elective courses for a total of 138 credit hours. Students must pass all nursing courses with a B or better and maintain a nursing 3.0 GPA. RNs transferring from community colleges can transfer in 57 prerequisite credits along with 33 RN credits of which 10 are considered upper division for a total of 90 credit hours. This applies only to the students in the RN to BSN/MS option.

Specific Prerequisite Requirements

Course	Title	Credits
ENG 101	Rhetoric & Writing I (GT-CO1)	3
ENG 102	Rhetoric & Writing II (GT-CO2)	3
CID 103	Speaking & Listening	3
BIOL 206	Introduction to Microbiology	3
BIOL 206L	Introduction to Microbiology Lab	1
BIOL 223	Human Physiology and Anatomy I (GT-SC2)	3
BIOL 223L	Human Physiology and Anatomy I Lab (GT-SC1)	1
BIOL 224	Human Physiology and Anatomy II (GT-SC2)	3
BIOL 224L	Human Physiology and Anatomy II Lab (GT-SC1)	1
CHEM 111	Principles of Chemistry (GT-SC2) [2]	3
CHEM 111L	Principles of Chemistry Lab (GT-SC1) [2]	1
MATH 156	Introduction to Statistics (GT-MA1)	3
PSYC 151	Human Development (GT-SS3)	3
NSG 207	Nursing Pathophysiology (or BIO 266 from a Colorado CC)	3
General Education: History		3
General Education: World Language		3
General Education: Humanities		3
General Education: Social Science		3
Electives		10-11

[1] CID 221 Interpersonal Communication (3 c.h.) will be accepted in lieu of CID 103 Speaking & Listening (3 c.h.) but students must complete additional Gen Ed Humanities.

[2] May substitute CHEM 121 General Chemistry I (GT-SC2) (4 c.h.)/CHEM 121L General Chemistry Lab I (GT-SC1) (1 c.h.)

Specific Concentration Requirements

Course	Title	Credits
Nursing Transfer/Credit through articulation		**33**
Prerequisite Courses		**57**
RN-MS (Nursing) Courses		

NSG 309	Professional Nursing Practice	4
NSG 311	Integration of QSEN for Nurses	3
NSG 371	Healthcare Informatics	2
NSG 451	Nursing Leadership and Issues	3
NSG 443	Global Public Health Nursing for RN's	3
NSG 443L	Global Public Health Nursing Lab for RN's	3
NSG 512	Research & Evidenced Based Practice	3
NSG 548	Healthcare: Ethics, Law & Policy	3
NSG 551	Health Promotion	2
NSG 552	Advanced Pathophysiology	3
NSG 561	Advanced Pharmacology	3
NSG 562 & 562L	Advanced Assessment and Advanced Assessment Lab	3
NSG 575	Curriculum Development	3
NSG 576	Instructional Strategies	3
NSG 577	Assessment & Evaluation	3
NSG 583 & 583L	Nurse Educator Seminar and Nurse Educator Practicum	4
Total Credits		**138**

The graduate degree will be granted to candidates who meet all of the University catalog requirements plus the following:

1. Graduate cumulative GPA of 3.0 or better.
2. All courses must be passed with a B or better.
3. Completed oral comprehensive exam or directed research or thesis. If choosing to complete a directed research project or thesis you will need to contact the Graduate Nursing Program Coordinator by the end of your second semester.

Nursing: Nurse Educator Concentration, Master of Science

MS Nurse Educator

The School of Nursing offers the Master of Science degree with a major in nursing concentration Nurse Educator. Master's-prepared nurses may complete a post graduate certificate in the nurse educator concentration. This program prepares the nurse to practice as faculty in colleges, universities, hospital -based schools of nursing or technical schools, or as staff development educators in health care facilities. Nurse educators serve as role models and provide leadership needed to implement evidence-based practice. These leaders document the outcomes of educational programs and guide students through the learning process. The shortage of nurse educators may enhance career prospects since it affords job security and provides opportunities for nurses to maintain dual roles as educators and direct patient care providers. The graduate will be eligible to apply for the National League for Nursing Certified Nurse Educator Examination. Master's-prepared nurses may complete a post graduate certificate in the nurse educator concentration.

Nursing Mission

The mission of the School of Nursing is to prepare graduates for professional positions as safe, competent and caring nurses to meet the healthcare needs of diverse populations.

Acceptance of Transfer Credits

Transfer credit will be awarded per the published Graduate Programs section of the University catalog. Up to nine semester hours of transfer credits from an accredited institution may be applied to the degree with approval of the graduate program coordinator.

Time Limits

Courses completed 6 or more years before the date of graduation will not be accepted as satisfying graduation requirements without the approval by the graduate nursing program coordinator.

Specific Admission Requirements

Students are responsible for following all admission policies and procedures as outlined in the Graduate Studies section of the University catalog.

1. Complete application to the nursing program.
2. Proof of active, unrestricted Colorado or Colorado Nursing Compact State Registered Nurse license for all MS and MS-DNP emphasis options or by the end of the first semester for the BSN-DNP emphases options).
3. Bachelor's degree in Nursing from an accredited university with a 3.0 GPA, or higher (MS, BSN-DNP and associate post-masters certificate options).
4. All prerequisites must be passed with a C or better (C- is not acceptable) including statistics, microbiology and chemistry. Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission.

MS-DNP Program and associated post-masters certificate options. Master's degree in Nursing from an accredited university with a 3.0 GPA, or higher is required.

Program Outcomes

1. Eighty percent of graduates will:
   - Express satisfaction with the program
   - Pass national certification exam the first time
   - Be employed in role-related professional practice within six months to one year
2. Seventy percent of graduates will complete their program on-time starting from enrollment day one of the first class of their nursing option.
3. Eighty percent of employers' will express satisfaction with graduates' job performance.

Expected Student Learning Outcomes for Masters Programs

At the completion of the program, graduates will be able to:

1. Integrate evidence-based practice, ethical decision making and technology into advanced nursing practice.

2. Utilize interprofessional collaboration to provide safe, quality patient-centered care.

3. Explore quality improvement initiatives that affect delivery of advanced nursing practice and health care services.

Specific Program Requirements

Course	Title	Credits
Year 1		
Fall		
NSG 504	NSG Writing & Presentation Skills	1
NSG 552	Advanced Pathophysiology	3
NSG 561	Advanced Pharmacology	3
NSG 575	Curriculum Development	3
	Credits	**10**
Spring		
NSG 548	Healthcare: Ethics, Law & Policy	3
NSG 562	Advanced Assessment	2
NSG 562L	Advanced Assessment Lab	1
NSG 512	Research & Evidenced Based Practice	3
NSG 576	Instructional Strategies	3
	Credits	**12**
Summer		
NSG 551	Health Promotion	2
NSG 577	Assessment & Evaluation	3
NSG 583	Nurse Educator Seminar	1
NSG 583L	Nurse Educator Practicum	3
	Credits	**9**
	Total Credits	**31**

Optional Thesis Elective

Course	Title	Credits
NSG 593	Thesis Seminar [1]	3
NSG 599	Thesis Research [2]	3-6
Total Credits		**6-9**

[2] NSG 593 Thesis Seminar (3 c.h.) and NSG 599 Thesis Research (1-6 c.h.): Thesis is one of three options to complete graduation requirements.

The graduate degree will be granted to candidates who meet all of the University catalog requirements plus the following:

1. Graduate cumulative GPA of 3.0 or better.
2. All courses must be passed with a B or better.
3. Completed oral comprehensive exam or directed research or thesis. If choosing to complete a directed research project or thesis you will need to contact the Graduate Nursing Program Coordinator by the end of your second semester.

Nursing: Nurse Manager & Leader Concentration, Master of Science

MS Nurse Manager Leader

The Nurse Manager and Leader, Master of Science program at CSU Pueblo prepares students to obtain advanced positions in their respective fields. Nurse managers and leaders are involved in a healthcare facility's high-level operations, strategic planning, and long-term vision. Pursuing a Nurse Manager and Leader degree opens up opportunities of advancing into positions with more leadership responsibilities, such as directors, coordinators, and chief nursing officers. At CSU Pueblo, the curriculum for this degree program is designed to help students create an individualized path with projects that are specific to their personal goals.

Nurse Manager Leader certification is available through the American Organization for Nursing Leadership (AONL) for nurse leaders in the nurse manager role. To sit for the certification exam, experience as a Nurse Manager Leader is required.

Specific Admission Requirements

Students are responsible for following all admission policies and procedures as outlined in the Graduate Studies section of the University catalog.

1. Complete application to the nursing program.
2. Proof of active, unrestricted Colorado or Colorado Nursing Compact State Registered Nurse license for all MS and MS-DNP emphasis options or by the end of the first semester for the BSN-DNP emphases options).
3. Bachelor's degree in Nursing from an accredited university with a 3.0 GPA, or higher (MS, BSN-DNP and associate post-masters certificate options).
4. All prerequisites must be passed with a C or better (C- is not acceptable) including statistics, microbiology and chemistry. Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission.

MS-DNP Program and associated post-masters certificate options. Master's degree in Nursing from an accredited university with a 3.0 GPA, or higher is required.

Specific Admission Requirements

Students are responsible for following all admission policies and procedures as outlined in the Graduate Programs section of the University catalog.

1. Complete application to the nursing program.
2. Proof of active, unrestricted Colorado Registered Nurse license or current enrollment in a Colorado Community College or a compact state ADN program
3. Residency in a Colorado Nursing Compact State.
4. All prerequisites must be passed with a C or better (C- is not acceptable) including statistics, microbiology and chemistry. Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission.

Students can pursue the Nurse Manager & Leader, Master of Science Online Program if the following admission criteria is met:

- **Nursing License**: Applicants must have Colorado Nursing License or from a compact state in good standing.
- **Baccalaureate Degree**: Students must have satisfactorily completed a Bachelor's Degree in Nursing from an institution accredited by a regional accreditation agency or equivalent.
- **Grade Point Average:** Students must have a minimum 3.0 GPA to get accepted into the program.
- **Statistics, Chemistry and Microbiology Coursework:** Students must have passed at least one undergraduate level statistics course with a grade of C or higher.
- **Background Check:** Per Colorado Law, the University is required to run a background check on applicants.
- **Immunization Record:** Applicants must provide latest record of vaccinations received

- **CPR Certification:** All students registered in graduate nursing programs are required to provide proof of being CPR Certified.
- **Letters of Recommendation:** Three letters of recommendation must be submitted from the following areas:
  - Professional or Academic
  - Clinical
  - Other
- Letter of Intent: The letter must include a brief history of self, reason for pursuing the degree, and plan of how the applicant will manage the program course load.
- Curriculum Vitae: Candidates must submit a CV in the University-Approved template.

Program Outcomes

1. Eighty percent of graduates will:
   - Express satisfaction with the program
   - Pass national certification exam the first time
   - Be employed in role-related professional practice within six months to one year
2. Seventy percent of graduates will complete their program on-time starting from enrollment day one of the first class of their nursing option.
3. Eighty percent of employers' will express satisfaction with graduates' job performance.

Expected Student Learning Outcomes for Masters Programs

At the completion of the program, graduates will be able to:

1. Integrate evidence-based practice, ethical decision making and technology into advanced nursing practice.
2. Utilize interprofessional collaboration to provide safe, quality patient-centered care.
3. Explore quality improvement initiatives that affect delivery of advanced nursing practice and health care services.

Specific Program Requirements

Course	Title	Credits
ACCT 510	Managerial Accounting	3
CIS 565	Management Information Systems	3
FIN 530	Financial Management	3
MGMT 520	Management of Organizational Behavior	3
MGMT 540	Managing Human Resources	3
MKTG 540	Marketing Management	3
NSG 504	NSG Writing & Presentation Skills	1
NSG 505	Biostatistics & Research	3
NSG 512	Research & Evidenced Based Practice	3
NSG 548	Healthcare: Ethics, Law & Policy	3
NSG 571	Healthcare Informatics	2
NSG 594	Field Experience [1]	2
NSG 688	MS Nurse Manager & Leader Practice Capstone [2]	3
Total Credits		**35**

[1] Students must complete 12 credits from the list prior to registration in NSG 594.

[2] Students must complete NSG 688 in the program final semester.

Specific Graduation Requirements

The graduate degree will be granted to candidates who meet all of the University catalog requirements plus the following:

1. Graduate cumulative GPA of 3.0 or better.
2. All courses must be passed with a B or better.

Nursing: Population Health Concentration, Doctor of Nursing Practice

Post MS to DNP Population Health

The Doctor of Nursing Practice (DNP) degree is designed to prepare nurses for the highest level of clinical practice in the profession of nursing. Graduates are prepared to create and lead new models of health care delivery for communities locally, across the nation and around the world. The DNP program is innovative, inter-/intra-professional and focuses on evidence-based population focused health care. The program maximizes the use of hybrid delivery methods for enhanced learning and increased course accessibility. (To read more about the DNP, visit the American Association of Colleges of Nursing website:https://www.aacnnursing.org/)

The School of Nursing offers the DNP for the:

- Baccalaureate-prepared registered nurse
- Master-prepared nurse practitioner who is certified in adult/geriatric acute care, family or psychiatric-mental health
- Post-master's registered nurse

The School of Nursing also offers the post graduate certificate for DNP-prepared nurses in all concentrations. The plan of study is individualized based on academic completion and requirements.

School of Nursing Mission

The mission of the School of Nursing is to prepare graduates for professional positions as safe, competent, and caring nurses to meet the health care needs of diverse populations.

Acceptance of Transfer Credits

Transfer credit will be awarded per the published Graduate Programs section of the University catalog. A maximum of nine semester hours of transfer credits from an accredited institution may be applied to the degree with approval from the graduate nursing program director.

Time Limits

Courses completed 6 or more years before the date of graduation will not be accepted as satisfying graduation requirements without the approval by the graduate nursing program director.

Specific Admission Requirements

Students are responsible for following all admission policies and procedures as outlined in the Graduate Studies section of the University catalog.

1. Complete application to the nursing program.
2. Proof of active, unrestricted Colorado or Colorado Nursing Compact State Registered Nurse license for all MS and MS-DNP emphasis options or by the end of the first semester for the BSN-DNP emphases options).
3. Bachelor's degree in Nursing from an accredited university with a 3.0 GPA, or higher (MS, BSN-DNP and associate post-masters certificate options).
4. All prerequisites must be passed with a C or better (C- is not acceptable) including statistics, microbiology and chemistry. Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission.

MS-DNP Program and associated post-masters certificate options. Master's degree in Nursing from an accredited university with a 3.0 GPA, or higher is required.

Program Outcomes

1. Eighty percent of graduates will:
   - Express satisfaction with the program
   - Pass national certification exam the first time
   - Be employed in role-related professional practice within six months to one year
2. Seventy percent of graduates will complete their program on-time starting from enrollment day one of the first class of their nursing option.
3. Eighty percent of employers' will express satisfaction with graduates' job performance.

DNP Graduate Student Learning Outcomes

At the completion of this program, graduates will be able to:

1. Integrate evidence-based practice, ethical decision making and technology into advanced nursing practice
2. Conduct scholarly inquiry to influence health outcomes of individuals, aggregates and populations
3. Organize interprofessional collaboration to provide safe, quality patient-centered care.
4. Assume a leadership role in transforming health care systems, policies and standards of care

Specific Program Requirements

Students who did not complete a minimum of 500 clinical hours in their master's program must complete 1-16 credits of NSG 709L as determined by admission gap analysis.

Course	Title	Credits
Year 1		
Fall		
NSG 504	NSG Writing & Presentation Skills	1
NSG 505	Biostatistics & Research	3
NSG 716	Health Care Business & Finance	4
NSG 801	Doctor of Nursing Practice Seminar	1
	Credits	**9**
Spring		
NSG 748	Healthcare: Ethics, Law & Policy	4
NSG 712	Research & Evidence Based Practice	3
NSG 718	Organizational & Systems Leadership	4
NSG 809L	MS NSG DNP Project Practicum	1-16
	Credits	**12-27**
Summer		
NSG 714	Epidemiology	3
NSG 809L	MS NSG DNP Project Practicum	1-16
	Credits	**4-19**
Year 2		
Fall		
NSG 809L	MS NSG DNP Project Practicum	1-16
	Credits	**1-16**
Spring		
NSG 809L	MS NSG DNP Project Practicum	1-16
	Credits	**1-16**
Summer		
NSG 810L	DNP Project Practicum (if needed)	1
	Credits	**1**
	Total Credits	**28-88**

Course	Title	Credits
Total Lab Hours		**0**
Total DNP Practicum Hours		**540-720**
Total Practicum Hours		**540-720**
Total Program Credits		**32-50**

Specific Graduation Requirements

The graduate degree will be granted to candidates who meet all of the University catalog requirements plus the following:

1. Graduate cumulative GPA of 3.0 or better.
2. All courses must be passed with a B or better.
3. Complete an approved DNP Project.

Nursing: Psychiatric-Mental Health Nurse Practitioner Concentration, Doctor of Nursing Practice

BSN-DNP Psychiatric-Mental Health

The Doctor of Nursing Practice (DNP) degree is designed to prepare nurses for the highest level of clinical practice in the profession of nursing. Graduates are prepared to create and lead new models of health care delivery for communities locally, across the nation and around the world. The DNP program is innovative, inter-/intra-professional and focuses on evidence-based health care. The program maximizes the use of hybrid delivery methods for enhanced learning and increased course accessibility. (To read more about the DNP, visit the American Association of Colleges of Nursing website: https://www.aacnnursing.org/)

This program will prepare students to provide advanced evidence-based patient-centered care psychiatric and mental health patients across the lifespan. The graduate will be eligible to take the Psychiatric-Mental Health Nurse Practitioner certification examination.

The School of Nursing offers the DNP for the:

- Baccalaureate-prepared registered nurse
- Master-prepared nurse practitioner who is certified in adult/geriatric acute care, family or psychiatric-mental health
- Post-master's registered nurse

Some states require a specific master's degree to practice as a nurse practitioner; therefore, a concurrent Master of Science with a major in Nursing will be awarded with completion of the DNP.

The School of Nursing also offers the post graduate certificate for DNP-prepared nurses. The plan of study is individualized based on academic completion and requirements.

School of Nursing Mission

The mission of the School of Nursing is to prepare graduates for professional positions as safe, competent, and caring nurses to meet the health care needs of diverse populations.

Acceptance of Transfer Credits

Transfer credit will be awarded per the published Graduate Programs section of the University catalog. A maximum of nine semester hours of transfer credits from an accredited institution may be applied to the degree with approval from the graduate nursing program director.

Time Limits

Courses completed 6 or more years before the date of graduation will not be accepted as satisfying graduation requirements without the approval by the graduate nursing program director.

Specific Admission Requirements

Students are responsible for following all admission policies and procedures as outlined in the Graduate Studies section of the University catalog.

1. Complete application to the nursing program.
2. Proof of active, unrestricted Colorado or Colorado Nursing Compact State Registered Nurse license for all MS and MS-DNP emphasis options or by the end of the first semester for the BSN-DNP emphases options).
3. Bachelor's degree in Nursing from an accredited university with a 3.0 GPA, or higher (MS, BSN-DNP and associate post-masters certificate options).
4. All prerequisites must be passed with a C or better (C- is not acceptable) including statistics, microbiology and chemistry. Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission.

MS-DNP Program and associated post-masters certificate options. Master's degree in Nursing from an accredited university with a 3.0 GPA, or higher is required.

Program Outcomes

1. Eighty percent of graduates will:
   - Express satisfaction with the program
   - Pass national certification exam the first time
   - Be employed in role-related professional practice within six months to one year
2. Seventy percent of graduates will complete their program on-time starting from enrollment day one of the first class of their nursing option.
3. Eighty percent of employers' will express satisfaction with graduates' job performance.

DNP Graduate Student Learning Outcomes

At the completion of this program, graduates will be able to:

1. Integrate evidence-based practice, ethical decision making and technology into advanced nursing practice
2. Conduct scholarly inquiry to influence health outcomes of individuals, aggregates and populations
3. Organize interprofessional collaboration to provide safe, quality patient-centered care.
4. Assume a leadership role in transforming health care systems, policies and standards of care

Specific Program Requirements

Course	Title	Credits
Year 1		
Fall		
NSG 504	NSG Writing & Presentation Skills	1
NSG 505	Biostatistics & Research	3
NSG 507	Advanced Practice Roles	2
NSG 508	Advanced Practice Theory	3
	Credits	**9**
Spring		
NSG 562	Advanced Assessment	2
NSG 562L	Advanced Assessment Lab	1
NSG 748	Healthcare: Ethics, Law & Policy	4
NSG 712	Research & Evidence Based Practice	3
	Credits	**10**
Summer		
NSG 551	Health Promotion	2
NSG 571	Healthcare Informatics	2
NSG 714	Epidemiology	3
	Credits	**7**
Year 2		
Fall		
NSG 552	Advanced Pathophysiology	3
NSG 561	Advanced Pharmacology	3
NSG 716	Health Care Business & Finance	4
	Credits	**10**
Spring		
NSG 676	Theoretical Mental Health Models	2
NSG 677	Psychopharmacology	2
NSG 718	Organizational & Systems Leadership	4
	Credits	**8**
Summer		
NSG 678	Psychiatric Assessment & Evaluation	2
NSG 679	Psychiatric Differential Diagnosis	2
NSG 801	Doctor of Nursing Practice Seminar	1
	Credits	**5**
Year 3		
Fall		
NSG 651	Psych Mental Health I	2
NSG 651L	PMH Practicum I	2

NSG 802	DNP Project Practicum I	3
	Credits	**7**
Spring		
NSG 652	Psych Mental Health II	2
NSG 652L	PMH Practicum II	2
NSG 803	DNP Project Practicum II	3
	Credits	**7**
Summer		
NSG 653	Psych Mental Health III	3
NSG 653L	PMH Practicum III	3
NSG 804	DNP Project Practicum III	2
	Credits	**8**
Year 4		
Fall		
NSG 654	Psych Mental Health IV	3
NSG 654L	PMH Practicum IV	3
NSG 805	DNP Project Practicum IV	3
	Credits	**9**
Spring		
NSG 808L	Final DNP Practicum PMHNP	6
	Credits	**6**
Summer		
NSG 810L	DNP Project Practicum (if needed)	1
	Credits	**1**
	Total Credits	**87**

Practicum Hours

Course	Title	Credits
Total Lab Hours		30
Total PMHNP Practicum Hours		780
Total DNP Practicum Hours		540
Total Practicum Hours		**1320**

All courses and number of credits for practicum must be completed in sequence following the program curriculum plan.

NSG 810L is not a required course. Students enroll if they meet and receive an incomplete grade in NSG 808L to meet university continuous enrollment requirement.

NSG 655L PMHNP Practicum MS (1-3 cr.) is a variable credit course. This program requires a total of 3 cr. and 10 cr. in other PMHNP practicum for a total of 13 cr. MS students complete NSG 655L 1- credit each semester with other PMHNP practicum courses over the final 3 semesters of the program.

Students admitted prior to Fall 2024: program requires 585 hours in PMHNP practicum.

Students admitted starting Fall 2024 need to complete 780 hours in PHMNP practicum.

Specific Graduation Requirements

The graduate degree will be granted to candidates who meet all of the University catalog requirements plus the following:

1. Graduate cumulative GPA of 3.0 or better.
2. All courses must be passed with a B or better.
3. Complete the university requirements for a master's degree.
4. Complete an approved DNP Project.

Nursing: Psychiatric-Mental Health Nurse Practitioner Concentration, Master of Science

MS Psychiatric-Mental Health

This program will prepare students to provide advanced evidence-based patient-centered care psychiatric and mental health patients across the lifespan. The graduate will be eligible to take the Psychiatric-Mental Health Nurse Practitioner certification examination.

School of Nursing Mission

The mission of the School of Nursing is to prepare graduates for professional positions as safe, competent, and caring nurses to meet the health care needs of diverse populations.

Acceptance of Transfer Credits

Transfer credit will be awarded per the published Graduate Programs section of the University catalog. A maximum of nine semester hours of transfer credits from an accredited institution may be applied to the degree with approval from the graduate nursing program director.

Time Limits

Courses completed 6 or more years before the date of graduation will not be accepted as satisfying graduation requirements without the approval by the graduate nursing program director.

Specific Admission Requirements

Students are responsible for following all admission policies and procedures as outlined in the Graduate Studies section of the University catalog.

1. Complete application to the nursing program.
2. Proof of active, unrestricted Colorado or Colorado Nursing Compact State Registered Nurse license for all MS and MS-DNP emphasis options or by the end of the first semester for the BSN-DNP emphases options).
3. Bachelor's degree in Nursing from an accredited university with a 3.0 GPA, or higher (MS, BSN-DNP and associate post-masters certificate options).
4. All prerequisites must be passed with a C or better (C- is not acceptable) including statistics, microbiology and chemistry. Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission.

MS-DNP Program and associated post-masters certificate options. Master's degree in Nursing from an accredited university with a 3.0 GPA, or higher is required.

Program Outcomes

1. Eighty percent of graduates will:
   - Express satisfaction with the program
   - Pass national certification exam the first time
   - Be employed in role-related professional practice within six months to one year

2. Seventy percent of graduates will complete their program on-time starting from enrollment day one of the first class of their nursing option.
3. Eighty percent of employers' will express satisfaction with graduates' job performance.

Expected Student Learning Outcomes for Masters Programs

At the completion of the program, graduates will be able to:

1. Integrate evidence-based practice, ethical decision making and technology into advanced nursing practice.
2. Utilize interprofessional collaboration to provide safe, quality patient-centered care.
3. Explore quality improvement initiatives that affect delivery of advanced nursing practice and health care services.

Specific Program Requirements

Course	Title	Credits
Year 1		
Fall		
NSG 504	NSG Writing & Presentation Skills	1
NSG 506	Roles and Issues	2
NSG 508	Advanced Practice Theory	3
NSG 552	Advanced Pathophysiology	3
NSG 561	Advanced Pharmacology	3
	Credits	**12**
Spring		
NSG 512	Research & Evidenced Based Practice	3
NSG 562	Advanced Assessment	2
NSG 562L	Advanced Assessment Lab	1
NSG 676	Theoretical Mental Health Models	2
NSG 677	Psychopharmacology	2
	Credits	**10**
Summer		
NSG 551	Health Promotion	2
NSG 571	Healthcare Informatics	2
NSG 678	Psychiatric Assessment & Evaluation	2
NSG 679	Psychiatric Differential Diagnosis	2
	Credits	**8**
Year 2		
Fall		
NSG 651	Psych Mental Health I	2
NSG 651L	PMH Practicum I	2
	Credits	**4**
Spring		
NSG 548	Healthcare: Ethics, Law & Policy	3
NSG 652	Psych Mental Health II	2
NSG 652L	PMH Practicum II	2
NSG 655L	PMH Practicum MS	1-3
	Credits	**8-10**
Summer		
NSG 653	Psych Mental Health III	3
NSG 653L	PMH Practicum III	3
NSG 655L	PMH Practicum MS	1-3
	Credits	**7-9**
Year 3		
Fall		
NSG 654	Psych Mental Health IV	3
NSG 654L	PMH Practicum IV	3
NSG 655L	PMH Practicum MS	1-3
	Credits	**7-9**
	Total Credits	**56-62**

Course	Title	Credits
Optional		
NSG 505	Biostatistics & Research	3
NSG 575	Curriculum Development	3
NSG 576	Instructional Strategies	3
NSG 577	Assessment & Evaluation	3
NSG 593	Thesis Seminar	3
NSG 599	Thesis Research	3-6

Practicum Hours

Course	Title	Credits
Total Lab Hours		30
Total Clinical Practice Hours		780
Open Electives		0-21
Total Practicum Hours		**810-831**

All courses and number of credits for practicum must be completed in sequence following the program curriculum plan.

NSG 655L PMHNP Practicum MS (1-3 cr.) is a variable credit course. This program requires a total of 3 cr. and 10 cr. in other PMHNP practicum for a total of 13 cr. MS students complete NSG 655L 1- credit each semester with other PMHNP practicum courses over the final 3 semesters of the program.

Students admitted prior to Fall 2024: program requires 585 hours in PMHNP practicum.

Students admitted starting Fall 2024 need to complete 780 hours in PHMNP practicum.

All students must successfully pass an oral comprehensive exam to meet concentration competency requirements or Thesis is optional (6-9 cr.).

Specific Graduation Requirements

The graduate degree will be granted to candidates who meet all of the University catalog requirements plus the following:

1. Graduate cumulative GPA of 3.0 or better.
2. All courses must be passed with a B or better.
3. Completed oral comprehensive exam or directed research or thesis. If choosing to complete a directed research project or thesis you will need to contact the Graduate Nursing Program Coordinator by the end of your second semester.

Nursing: Psychiatric-Mental Health Nurse Practitioner, Post Masters Certification

Post MS PMHNP Certificate

The School of Nursing offers the post masters certificate for MS, MSN or doctorate prepared nurses. The plan of study is individualized based on academic completion and requirements using a gap analysis evaluation. This program prepares students to provide evidence-based,

safe, quality patient-centered care in psychiatric-mental health across the lifespan. The graduate will be eligible to take the Psychiatric-Mental Health Nurse Practitioner certification examination.

Specific Admission Requirements

Students are responsible for following all admission policies and procedures as outlined in the Graduate Studies section of the University catalog.

1. Complete application to the nursing program.
2. Proof of active, unrestricted Colorado or Colorado Nursing Compact State Registered Nurse license for all MS and MS-DNP emphasis options or by the end of the first semester for the BSN-DNP emphases options).
3. Bachelor's degree in Nursing from an accredited university with a 3.0 GPA, or higher (MS, BSN-DNP and associate post-masters certificate options).
4. All prerequisites must be passed with a C or better (C- is not acceptable) including statistics, microbiology and chemistry. Students receiving a grade less than C in a nursing prerequisite course are not eligible for admission.

MS-DNP Program and associated post-masters certificate options. Master's degree in Nursing from an accredited university with a 3.0 GPA, or higher is required.

BSN or MS (Nursing) to DNP or Post Masters Certificate

Students are responsible for following all admission policies and procedures as outlined in the *Graduate Programs* section of the University catalog.

1. Baccalaureate degree in nursing from an institution accredited by a regional accreditation agency (or equivalent).
2. Undergraduate BSN cumulative GPA of 3.0 or higher will consider courses with a graduate nursing GPA of 3.0 or higher.
3. Undergraduate statistics course with a grade of C or higher.
4. Application for admission to graduate programs in the university Office of Admission (admission to graduate programs does not constitute admission to the nursing graduate program).
5. Proof of active, unrestricted Colorado Registered Nurse license by the end of the first semester of the program.
6. Background check per Colorado Law (see application).
7. Current immunizations.
8. Current certification in CPR (Health Care Provider – C or equivalent).
9. Three letters of recommendation:
    a. Professional or Academic
    b. Clinical
    c. Other
10. Letter of intent that includes:
    a. Brief professional history
    b. Reason for pursuing advanced degree
    c. How applicant will manage work, home, and study
11. Curriculum Vitae

(Use the template located under *Graduate Nursing Student Application Instructions on the website*)

Preference for acceptance will be given to applicants who have:

1. 2000 Hours (1 year full-time) experience as a registered nurse (AGACNP, AGACNP/FNP and PMHNP emphases only).
2. One year or more of experience as a clinical adjunct instructor (Nurse Educator only)
3. Residency in Southern Colorado
4. Graduate from CSU Pueblo

If accepted into a program, requirements prior to attending first class include:

1. Drug screen
2. Physical exam within last 12 months

Program Outcomes

1. Eighty percent of graduates will:
    - Express satisfaction with the program
    - Pass national certification exam the first time
    - Be employed in role-related professional practice within six months to one year
2. Seventy percent of graduates will complete their program on-time starting from enrollment day one of the first class of their nursing option.
3. Eighty percent of employers' will express satisfaction with graduates' job performance.

The End Of Program Student Learning Outcomes:

1. Integrate evidence-based practice, ethical decision-making and technology into advanced nursing practice.
2. Utilize inter-professional collaboration to provide safe, quality patient-centered care.
3. Explore quality improvement initiatives that affect delivery of advanced practice nursing and health care services.

Specific Program Requirements

Students seeking post masters' certificate or DNP Degree 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. A student must complete a minimum of 16 postgraduate credit hours at CSU Pueblo to be eligible for a post masters certificate. Core courses must be completed to meet the mandates of the Colorado State Board of Nursing for Advanced Nursing Practice. A total of 585 clinical hours must be documented for each nurse practitioner concentration. The student's plan is developed based on the academic course work already completed.

See masters PMHNP for complete curriculum requirements.

Course	Title	Credits
NSG 651	Psych Mental Health I	2
NSG 651L	PMH Practicum I	2
NSG 652	Psych Mental Health II	2
NSG 652L	PMH Practicum II	2
NSG 653	Psych Mental Health III	3
NSG 653L	PMH Practicum III	3
NSG 654	Psych Mental Health IV	3

NSG 654L	PMH Practicum IV	3
NSG 655L	PMH Practicum MS	1
NSG 676	Theoretical Mental Health Models	2
NSG 677	Psychopharmacology	2
NSG 678	Psychiatric Assessment & Evaluation	2
NSG 679	Psychiatric Differential Diagnosis	2

Minimum Courses Required

See masters PMHNP for complete curriculum requirements.

Course	Title	Credits
NSG 676	Theoretical Mental Health Models	2
NSG 677	Psychopharmacology	2
NSG 678	Psychiatric Assessment & Evaluation	2
NSG 679	Psychiatric Differential Diagnosis	2
NSG 651	Psych Mental Health I	2
NSG 651L	PMH Practicum I	2
NSG 652	Psych Mental Health II	2
NSG 652L	PMH Practicum II	2
NSG 653	Psych Mental Health III	3
NSG 653L	PMH Practicum III	3
NSG 654	Psych Mental Health IV	3
NSG 654L	PMH Practicum IV	3
NSG 655L	PMH Practicum MS	1-3

COURSE DESCRIPTION INFORMATION

Colorado State University Pueblo does not offer all of the courses listed in this catalog every semester or every year. All courses are offered as needed (AN) unless otherwise stated.

In addition, each semester the University creates an on-line course offering list detailing the schedule of courses. This includes but is not limited to courses offered, course description, times and places of instruction, instructors, learning modality, course level, grade mode, etc. Courses listed in the course offerings are subject to change.

The University reserves the right to cancel courses not selected by an adequate number of students or not suitably staffed by qualified faculty.

A

- Accounting (ACCT) (p. 577)
- American Sign Language (ASL) (p. 578)
- Anthropology (ANTH) (p. 579)
- Art (ART) (p. 582)
- Art History (ARH) (p. 586)
- Art, Research, & Creativity (ARC) (p. 580)
- Athletic Training (AT) (p. 587)
- Automotive Industry Management (AIM) (p. 589)

B

- Biology (BIOL) (p. 591)
- Business Administration (BSAD) (p. 602)

C

- Cannabis Biology & Chemistry (CBC) (p. 604)
- Center for Teaching & Learning (CTL) (p. 605)
- Chemistry (CHEM) (p. 606)
- Chicano Studies (CS) (p. 612)
- Civil Engineering (CE) (p. 613)
- Civil Engineering Technology (CET) (p. 615)
- Communication & Information Design (CID) (p. 617)
- Communities to Build Active STEM Engagement (CBSE) (p. 618)
- Computer Information Systems (CIS) (p. 618)
- Construction Management (CM) (p. 621)
- Continuing Education (CNED) (p. 622)
- Continuous Registration (CR) (p. 623)
- Creative Wellness (CW) (p. 623)
- Criminology (CRIM) (p. 623)
- Culturally & Linguistically Diverse Education (CLDE) (p. 626)

D

- Diversity Studies (DS) (p. 627)

E

- Early Childhood Education (ECE) (p. 628)
- Economics (ECON) (p. 630)
- Education (ED) (p. 632)
- Engineering (EN) (p. 641)
- English (ENG) (p. 648)
- English as a Second Language (ESL) (p. 652)
- Escrow (ESCR) (p. 653)
- Exercise Science & Health Promotion (EPER) (p. 653)
- Extended Studies (EXST) (p. 662)

F

- Finance (FIN) (p. 662)
- French (FRN) (p. 663)

G

- Geography (GEOG) (p. 664)
- Geology (GEOL) (p. 665)
- German (GER) (p. 665)

H

- Health Science (HS) (p. 666)
- History (HIST) (p. 668)
- Honors (HONR) (p. 670)
- Humanities & Social Sciences (HSS) (p. 671)

I

- Institute of Cannabis Research (ICR) (p. 671)
- Italian (ITL) (p. 671)

L

- Library Archival Studies (LAS) (p. 673)

M

- Management (MGMT) (p. 673)
- Marketing (MKTG) (p. 676)
- Mathematics (MATH) (p. 677)
- Media & Entertainment (MAE) (p. 681)
- Military Science & Leadership (MSL) (p. 686)
- Music (MUS) (p. 687)

N

- Non-Profit Administration (NPA) (p. 706)
- Nursing (NSG) (p. 706)

P

- Philosophy (PHIL) (p. 715)
- Physics/Physical Science (PHYS) (p. 716)
- Political Science (POLS) (p. 719)
- President's Leadership Program (PLP) (p. 722)
- Psychology (PSYC) (p. 723)

R

- Reading (RDG) (p. 727)

S

- Science (SCI) (p. 728)
- Social Science (SCSC) (p. 728)
- Social Work (SW) (p. 729)
- Sociology (SOC) (p. 733)
- Spanish (SPN) (p. 737)

T

- Transportation Engineering (TENG) (p. 741)

U

- University Studies (US) (p. 741)

W

- Wildlife & Natural Resources (WANR) (p. 741)
- Women's Studies (WS) (p. 743)
- World Language (WL) (p. 745)

Course descriptions include a variety of components conveying essential information. The following standard course description with explanation of symbols serves as a model:

[1]**SOC** [2]**231** [3](PSYC 231, WS 231) [4]**Marriage and Family Relationships** [5]**3(3-0)**

[6] Fall, Spring.
[7] *Marriage and family from an institutional and relationship perspective: cross-cultural diversity, mate selection, marital dynamics, parenting, divorce, remarriage, emerging patterns.*
[8] *Prerequisite: None.*
[9] *Corequisite: None.*
[10] Registration Information: Permission of instructor.
[11] Gen Ed: SS

1 Course Subject
2 Course Number
3 Cross-Listed Courses
4 Course Title
5 Number of Credits (Lecture Contact Hours-Laboratory Contact Hours)
6 Terms Offered
7 Course Description
8 Prerequisites
9 Corequisites
10 Registration Information (including but not limited to restrictions)
11 General Education Designation

Not all of the above information may be noted in each course. Additional components may include:

- Course Suffix
- Cross-Cultural
- Grade Mode
- GT Pathways
- Registration Information
- Repeat Credit
- Requisites
- Variable Credit

House Numbered Courses

University-wide "house-numbered" courses are alternatives to the usual teaching formats of lectures, discussions, and/or laboratories. Several house numbered courses also use alternative grading systems. Additionally, policies, guidelines, and procedures pertaining to each category are presented herein.

Departments tailoring a house-numbered course/title to their degree may not use the generic course description (listed within the categories below) and must submit a course title and brief catalog description specific to the course as part of the course creation/approval process.

Cooperative Education Placement

- 296, 396, 496, 596, 696, 996

Field Experience

- 294, 394, 494, 594, 694, 994

Independent Study

- 295, 395, 495, 595, 695, 995

Internship

- 298, 398, 498, 598, 698, 998

Research

- 292, 392, 492, 592, 692, 992

Seminar

- 293, 393, 493, 593, 693, 993

Special Project

- 290, 390, 490, 590, 690, 990

Special Topics

- 291, 391, 491, 591, 691, 991

Studio Series

- 297, 397, 497, 597, 697, 997

Thesis Research

- 599, 699, 999

Workshop

- 200, 300, 400, 500, 600, 900

Numbering of Courses

Course numbering is based on the content level of material presented in courses.

Remedial [1]

- 000-099

Lower Division

Freshman/Sophomore Level

- 100-299

Upper Division

Junior/Senior Level

- 300-499

Graduate and/or Doctoral Level

- 500-899

Post-Master's Level

- 900-999

[1] Remedial courses do not count toward graduation or student level.

Requisites

Courses requisites are limitations to course registration either before or in conjunction with another course. **Requisites can only be test scores or active courses.** All other course restrictions are listed under the "Registration Information" section of the course description.

Prerequisites

Some courses list prerequisite requirements. These prerequisite requirements must be complete PRIOR to registering for the course.

Departments may choose to list prerequisite requirements and also allow concurrent enrollment in the course(s). Students should always first attempt to complete the prerequisite course BEFORE attempting concurrent enrollment.

Prerequisite Minimum Grade

The University policy for prerequisite grades is a C. However, departments have the authority to override individual course grade requirements.

Concurrent Prerequisites

A concurrent prerequisite course may be satisfied in the same term or in a term prior to enrollment in the “parent” course. Concurrent prerequisite courses are considered to be “connected” in Banner. If a student attempts to drop a class that is an enforced concurrent prerequisite of another enrolled class and no registration permit was given, the student will be warned that they must drop all connected classes.

Students may meet a concurrent prerequisite in one of the following ways:

- Earn at least the minimum grade in the prerequisite course in a prior term.
- Current enrollment in the prerequisite course when registering in the parent course for a future term.
- Register in the prerequisite course and parent course in the same term.

Unfortunately, concurrent prerequisites are not distinguished from standard prerequisites in Self-Service Banner (PAWS). Advisors and academic administrators can identify concurrent prerequisites from the SSAPREQ screens in the Banner Administrative system – look for “Yes” in the Concurrency column.

Corequisites

Some courses list corequisite requirements. These corequisite requirements must be completed IN CONJUNCTION with one another.

Registration Restrictions

Registration requirements that are NOT test scores or active courses can be included in the "Registration Information" section of the course description. These restrictions may or may not be enforced at the time of registration. Enforcement of registration restrictions are at the discretion of the department.

Unique Courses

Cross-Cultural

Students must take at least one course that is designated as cross-cultural to fulfill General Education requirements. These courses have a designation of **CC** next to their listing.

For additional information regarding the cross-cultural requirement, please see the General Education (p. 62) section of the catalog.

Cross-Listed

Cross listed courses are courses that are identical with the exception of a differentiating prefix. These courses share the same description, number, classroom, instructor, etc.

Students may earn credit under only one of the cross-listed prefixes.

General Education

Courses with a General Education designation fulfill the Skills and/or Knowledge components of the General Education requirements. General Education designations are as follows:

- E - Written Communication (English Composition)
- H - Humanities
- HS - History
- M - Quantitative Reasoning (Mathematics)
- SS - Social Science
- ST - Natural & Physical Science

For additional information regarding the General Education requirement, please see the General Education (p. 62) section of the catalog.

GT Pathways

Courses with a GT designation will always transfer and apply to GT Pathways requirements in AA, AS, and most bachlelor's degrees at every public Colorado college or university. GT Pathway designations are as follows:

- AT - Arts & Humanities
- CO - Composition
- HI - History
- MA - Mathematics
- SC - Science
- SS - Social Science

For additional information and transfer restrictions related to GT Pathways, please visit the CDHE (https://cdhe.colorado.gov/guaranteed-transfer-gt-pathways-general-education-curriculum-0/) website.

Variable Credit

A course with a credit range followed by "VAR" indicates a course with variable credit. The credit range indicates the minimum and maximum credit limitations.

For example, a course with (1-3 VAR) has a minimum allowance of 1 credit and a maximum allowance of 3 credits; students can also choose to take the course as 2 credits.

Prior to registering for a variable credit course, students should always consult with an Academic Advisor to determine the appropriate number of credits to meet graduation requirements.

Repeatable Courses

Some specified courses may be repeated for credit. These courses are designated by the word "Repeatable" in the Course Description. The number after the word Repeatable indicates the maximum number of credits that may be used toward degree requirements.

Accounting (ACCT)

ACCT 101 Accounting for Non-Business Majors 3(3-0)
As Needed.
Survey of accounting course. Topics: accounting concepts, accounting information users, elements and purpose of financial statements, accrual accounting, internal control, and basic financial analysis.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ACCT 201 Principles of Financial Accounting 3(3-0)
As Needed.
Introduction to accounting as the language of business. Emphasis on reasoning and logic of external reporting model. May include computer-based applications.
Prerequisite: MATH 101 or MATH 109 or MATH 156 or BSAD 265.
Corequisite: None.
Registration Information: None.

ACCT 202 Principles of Managerial Accounting 3(3-0)
As Needed.
Managerial uses of accounting information, including cost-based, decision making, differential accounting, and responsibility accounting. May include computer-based applications.
Prerequisite: ACCT 201.
Corequisite: None.
Registration Information: None.

ACCT 291 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ACCT 301 Intermediate Accounting I 3(3-0)
As Needed.
Conceptual framework, accounting cycle, financial statements, time value of money, revenue recognition, and accounting for cash, receivables, inventory, and long-term assets.
Prerequisite: ACCT 202.
Corequisite: None.
Registration Information: Junior standing.

ACCT 302 Intermediate Accounting II 3(3-0)
As Needed.
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: ACCT 301.
Corequisite: None.
Registration Information: None.

ACCT 311 Federal Income Tax 3(3-0)
As Needed.
Federal income tax as applied to income recognition, exclusions from income and property transactions of individuals. Introduction to tax research resources and techniques.
Prerequisite: ACCT 202.
Corequisite: None.
Registration Information: None.

ACCT 320 Cost Accounting 3(3-0)
As Needed.
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: ACCT 202.
Corequisite: None.
Registration Information: Junior standing.

ACCT 330 Accounting Information Systems 3(3-0)
As Needed.
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: ACCT 201.
Corequisite: None.
Registration Information: None.

ACCT 401 Advanced Financial Accounting 3(3-0)
As Needed.
Application of fundamental theory to partnerships, international operations, consolidated statements, and business combinations; introduction to government.
Prerequisite: ACCT 302.
Corequisite: None.
Registration Information: None.

ACCT 404 CPA Law 3(3-0)
As Needed.
Business law as found in the Regulation section of the Uniform CPA examination.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Accounting major only.

ACCT 410 Auditing 3(3-0)
As Needed.
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: ACCT 302 and ACCT 330.
Corequisite: None.
Registration Information: None.

ACCT 411 Corporate, Estate and Gift Tax 3(3-0)
As Needed.
Taxation of corporations, partnerships, estates/trusts. Analysis of mergers and dissolution of corporations. Introduction to estate/gift taxes and international taxation.
Prerequisite: ACCT 311.
Corequisite: None.
Registration Information: None.

ACCT 412 Advanced Auditing 3(3-0)
As Needed.
Study of auditing and attestation services in the public accounting environment with special emphasis on auditing methodologies and research.
Prerequisite: ACCT 410.
Corequisite: None.
Registration Information: Permission of instructor.

ACCT 415 Accounting Ethics 3(3-0)
As Needed.
Accounting Ethics focuses on teaching students the standards of right and wrong, using various real-life corporate failures. Students apply ethical standards to solve problems.
Prerequisite: ACCT 410.
Corequisite: None.
Registration Information: None.

ACCT 491 Special Topics 1-3(1-3-1-3)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

ACCT 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Permission of advisor. Accounting major only. Repeatable (6).

ACCT 498 Internship (1-6 V)
As Needed.
Supervised field work in selected business, social and governmental organizations; supplemented by written reports.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. HSB majors only. Permission of internship coordinator. Repeatable (6).

ACCT 501 Fundamentals of Accounting 1.5(1.5-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Admission to MBA.

ACCT 505 Principles of Financial Accounting 3(3-0)
As Needed.
Introduction to accounting as the language of business. Emphasis on reasoning and logic of external reporting model. May include computer-based applications.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA.

ACCT 510 Managerial Accounting 3(3-0)
Fall, Spring.
Accounting concepts and methods utilized in managerial planning, budgeting, controlling, and evaluating to optimize decision making.
Prerequisite: ACCT 201.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

ACCT 511 Tax Planning and Research 3(3-0)
As Needed.
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: ACCT 311.
Corequisite: None.
Registration Information: Admission to MBA.

ACCT 520 Advanced Cost Management Systems 3(3-0)
As Needed.
Cost systems supporting new management philosophies, JIT, total quality management, continuous improvement, process reengineering. Activity-based costing, target costs, cost of quality.
Prerequisite: ACCT 320.
Corequisite: None.
Registration Information: Admission to MBA.

ACCT 591 Special Topics 3(3-0)
As Needed.
Critical review and discussion of relevant accounting topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Repeatable (6).

ACCT 595 Independent Study (1-3 V)
As Needed.
Individual study of a subject determined by the instructor and student with permission of the director.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Repeatable (6).

American Sign Language (ASL)

ASL 101 Beginning American Sign Language I 3(3-0)
Fall, Spring.
Development of beginner skills. Students learn the basics of the language and an introduction to communicating with the Deaf community. Basic vocabulary, conversational skills, and aspects of the Deaf culture and community.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

ASL 102 Beginning American Sign Language II 3(3-0)
Fall, Spring.
Development of beginner skills. Continues basic conversational patterns to communicate with the Deaf community. The course covers vocabulary, conversational skills, and aspects of the Deaf culture and community.
Prerequisite: ASL 101.
Corequisites: None.
Registration Information: Permission of instructor.
(Gen Ed: H) (CC)

ASL 201 Intermediate American Sign Language I 3(3-0)
As Needed.
Development of intermediate-level skills. Students develop a stronger grasp of American Sign Language and cultural features of the language. ASL vocabulary is increased with emphasis on expressive skills in signing.
Prerequisite: ASL 102.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

ASL 202 Intermediate American Sign Language II 3(3-0)
As Needed.
Development of intermediate-level skills. Provides further study of American Sign Language grammar, syntax, and cultural features. Continues to develop competency and fluency in the language. Variations in ASL are addressed.
Prerequisite: ASL 102.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

Anthropology (ANTH)

ANTH 100 Cultural Anthropology (GT-SS3) 3(3-0)
Fall, Spring, Summer.
Introduction to the concepts by which anthropology understands particular lifestyles, and to the constructs by which it accounts for similarities and differences among lifestyles.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS3) (CC)

ANTH 101 Biological Anthropology 3(3-0)
Fall, Spring.
The course examines humans as biological organisms from an evolutionary perspective. Other primates and the significance of genetic diversity in modern human populations are discussed.
Prerequisite: None.
Corequisite: ANTH 101L.
Registration Information: None.
(Gen Ed: ST)

ANTH 101L Biological Anthropology Lab 1(0-2)
Fall, Spring.
The lab will reinforce and extend student understanding of biological anthropological concepts.
Prerequisite: None.
Corequisite: ANTH 101.
Registration Information: None.
(Gen Ed: ST)

ANTH 103 Introduction to Archaeology 3(3-0)
Fall.
This course introduces students to the field of archaeology. Examines how archaeologists acquire and interpret archaeological evidence. Reviews accepted practice and archaeological ethics and law.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

ANTH 105 (DS 105, PSYC 105, SOC 105, WS 105) Understanding Human Diversity 3(3-0)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ANTH 106 (ENG 106) Language, Thought and Culture 3(3-0)
As Needed.
Cross-cultural introduction to language processes in human society.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: SS) (CC)

ANTH 212 (CRIM 212) The Forensics of Bones 3(3-0)
As Needed.
An examination of the basic procedures used by forensic anthropologists to obtain evidence in criminal investigations.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ANTH 291 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: May not repeat the same topic. Repeatable (6).

ANTH 314 (SOC 314) Religion, Culture and Society 3(3-0)
As Needed.
Cross-cultural concepts and practices of the supernatural are studied. A holistic analysis to the role of religion in cultures and society.
Prerequisite: ANTH 100 or SOC 101.
Corequisite: None.
Registration Information: None.

ANTH 315 (SOC 315) Health, Culture, and Society 3(3-0)
Fall, Spring, Summer.
Cross-cultural concepts and approaches to health are studied. A holistic analysis of medicine as a cultural system as opposed to a biological one.
Prerequisite: ANTH 100 or SOC 101.
Corequisite: None.
Registration Information: None.

ANTH 316 (SOC 316) Age, Culture and Society 3(3-0)
As Needed.
Cross-cultural concepts and approaches to age are studied. A holistic analysis of the life course focusing on societal and cultural perceptions.
Prerequisite: ANTH 100 or SOC 101.
Corequisite: None.
Registration Information: None.

ANTH 317 Anthropology of Food 3(3-0)
As Needed.
This class will critically assess the multiple relationships between food, culture, and processes of globalization.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ANTH 318 Archaeology of Beer & Wine 3(3-0)
As Needed.
An examination of the archaeological evidence for the development and production of beer and wine in ancient cultures, and its various cultural contexts.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ANTH 321 (CRIM 321, SOC 321) Cross-Cultural Perspective on Crime 3(3-0)
As Needed.
An examination of crime in non-western societies with a comparison to crime and punishment in modern American society.
Prerequisite: ANTH 100 or CRIM 101 or SOC 101.
Corequisite: None.
Registration Information: None.

ANTH 340 Museum Conservation 3(3-0)
As Needed.
Introduction to museum conservation and collections care. Students become familiar with many common materials found in museum collections, their care and management, and the ethical responsibilities of museum personnel.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

ANTH 357 (CRIM 357, SOC 357) Immigration 3(3-0)
As Needed.
Examines migration processes, with a particular focus on immigration to the United States. Migration patterns are analyzed considering social, political, and historical context, including structural global patterns.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ANTH 491 Special Topics 1-3(1-3-1-3)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: May not repeat the same topic. Repeatable (6).

ANTH 492 Research (1-3 V)
As Needed.
Directed study for students interested in gaining research experience in anthropology.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing and permission of instructor. Repeatable (3).

ANTH 494 Field Experience (1-12 V)
As Needed.
Practical experience in an agency setting.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing and permission of instructor. Repeatable (12).

ANTH 495 Independent Study (1-3 V)
As Needed.
Directed study for students interested in specific areas of anthropological concern.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

Art, Research, & Creativity (ARC)

ARC 110 Integrated Studies 3(3-0)
Fall.
Integrated learning experience that targets elements of multiple areas of study. Builds literacy across disciplines using sound principles; develops students toward a meaningful discovery of their own creative voice.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ARC 174 Fundamentals of Digital Media 3(2-3)
Fall.
Examine the fundamental concepts and techniques for incorporating digital media into professional practices. Collaborate toward a functional understanding of how digital identity plays a role in any professional endeavor.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ARC 200 ARC Workshop (1-3 V)
As Needed.
Various topics and techniques across areas in the School of Creativity and Practice are explored in a workshop environment. Variable hours depending on topic, repeatable for credit with different workshops.
Prerequisites: ARC 110.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (6).

ARC 210 ARC: Design Frameworks 3(2-3)
Spring.
Develop basic tool sets for moving through creative thinking & ideation toward actionable processes & methodologies. Learn fundamental principles to productively explore questions, generate solutions & communicate ideas.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ARC 219 Converged Student Media (0 V)
Fall, Spring.
Practical converged and collaborative experience across the different student media outlets, mentored by faculty experts.
Prerequisites: None.
Corequisites: None.
Registration Information: Must be taken every semester with any ARC 229, 239, 249, 259, 329, 339, 349, 359 courses. Repeatable (10).

ARC 229 Practicum: Journalism & Print Publications 1(1-0)
Fall, Spring.
Practical experience working on The Today website and magazine and other campus publications as a multimedia journalist. Repeatable for a new, advanced, or expanded experience.
Prerequisites: None.
Corequisites: ARC 219.
Registration Information: Repeatable (6).

ARC 239 Practicum: Sound, Radio, & Podcasting 1(1-0)
Fall, Spring.
Practical experience working at the student-run radio station The Revolution, podcasting, and sound productions across student media. This course is repeatable for a new, advanced, or expanded experience.
Prerequisite: None.
Corequisites: ARC 219.
Registration Information: Repeatable (6).

ARC 249 Practicum: Film, Video, & Television 1(1-0)
Fall, Spring.
Practical experience producing and streaming visual content as a member of the student run film and video production team, Digital Sandbox. This course is repeatable for a new, advanced, or expanded experience.
Prerequisite: None.
Corequisites: ARC 219.
Registration Information: Repeatable (6).

ARC 259 Practicum: Media Design & Advertising 1(1-0)
Fall, Spring.
Practical experience working as part of the student-run social media, design and advertising team, SOCO Design. This course is repeatable for a new, advanced, or expanded experience.
Prerequisites: None.
Corequisites: ARC 219.
Registration Information: Repeatable (6).

ARC 300 Advanced ARC Workshop (1-3 V)
As Needed.
Various topics and techniques across areas in the School of Creativity and Practice are explored in an advanced workshop environment. Variable hours depending on topic, repeatable for credit with different workshops.
Prerequisite: ARC 174.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (6).

ARC 310 Critical Fundamental Skills Review 1(1-0)
Spring.
Prepare & present a developmental portfolio/performance presentation that demonstrates proficiency & potential at appropriate levels. Presentations reflect foundations coursework as well as independent research.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ARC 329 Advanced Practicum: Journalism & Print Publication 2(2-0)
Fall, Spring.
Advanced experience working in a leadership capacity for The Today website and magazine and other campus publications as a multimedia journalist. Repeatable for a new, advanced, or expanded experience.
Prerequisite: ARC 229.
Corequisites: ARC 219.
Registration Information: Repeatable (6).

ARC 339 Advanced Practicum: Sound, Radio, & Podcasting 2(2-0)
Fall, Spring.
Advanced experience working in a leadership capacity at the student-run radio station The Revolution, podcasting, and sound productions across student media. This course is repeatable for a new, advanced, or experience.
Prerequisites: ARC 239.
Corequisites: ARC 219.
Registration Information: Repeatable (6).

ARC 349 Advanced Practicum: Film, Video, & Television 2(2-0)
Fall, Spring.
Advanced experience producing and streaming visual content as a leader on the student run film and video production team, Digital Sandbox. This course is repeatable for a new, advanced, or expanded experience.
Prerequisites: ARC 249.
Corequisites: ARC 219.
Registration Information: Permission of instructor. Repeatable (6).

ARC 359 Advanced Practicum: Media Design & Advertising 2(2-0)
Fall, Spring.
Practical leadership experience working as part of the student-run social media, design and advertising team, SOCO Design. This course is repeatable for a new, advanced, or expanded experience.
Prerequisites: ARC 259.
Corequisites: ARC 219.
Registration Information: Repeatable (6).

ARC 378 Digital Animation Techniques 3(1-4)
As Needed.
Analyze various techniques of 2D & 3D animated works and demonstrate knowledge through short animation projects like walk cycles, rigging characters, design landscapes, storyboarding, and other approaches to animation.
Prerequisite: ARC 310.
Corequisite: None.
Registration Information: Repeatable (6).

ARC 384 Creative Code 3(2-3)
As Needed.
Utilize code as a creative medium. Investigate techniques such as generative design, networking, artificial intelligence, and machine learning and integrate those techniques into a creative vision.
Prerequisites: ARC 310.
Corequisites: None.
Registration Information: Repeatable (6).

ARC 399 Professional Conference Experience (1-3 V)
As Needed.
Students experience professional media conferences through participation as attendee, participant, presenter, and/or volunteer.
Prerequisites: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (9).

ARC 410 Senior Capstone Presentation 1(1-0)
Spring.
Prepare & present showcase portfolio/performance that reflect upper division coursework as well as independent research. Presentations will demonstrate viability to function effectively within appropriate creative industries.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ARC 475 Personal Vision: Gaming & Immersive Media 3(2-3)
As Needed.
Project proposal and exploration course with particular emphasis on process strategies for developing dynamic non-linear and interactive projects through gaming and immersive media tools.
Prerequisites: ARC 310.
Corequisites: None.
Registration Information: Repeatable (6).

ARC 478 Digital Animation Studio 3(2-3)
As Needed.
Create a fully realized animated short through thoughtful analysis of 2D and 3D animations, understanding the creative development process, and working collaboratively to realize an expressive vision.
Prerequisites: ARC 310 and ARC 378.
Corequisites: None.
Registration Information: Repeatable (6).

ARC 483 Art for the Internet 3(1-4)
As Needed.
Examine the influence of the internet on art through explorations of net art and new media art practices. Design projects that utilize the web as their primary mode of exhibition.
Prerequisites: ARC 310.
Corequisites: None.
Registration Information: Repeatable (6).

ARC 484 Creative Machines 3(2-3)
As Needed.
Explore creativity through engaging with microcontrollers, motors, LED's, machine learning, artificial intelligence, and creative coding. Students create fully realized digital and physical projects.
Prerequisites: ARC 310.
Corequisites: None.
Registration Information: Repeatable (6).

ARC 485 Interdisciplinary Media & Performance 3(2-3)
As Needed.
Collaborate with artists, producers, and technicians to create fixed and live new media works. Students utilize emerging technologies and performance strategies to enable new modes of expression.
Prerequisites: ARC 310.
Corequisites: None.
Registration Information: Repeatable (6).

Art (ART)

A grade of C or better is required for prerequisite courses.

ART 100 Visual Dynamics (GT-AH1) 3(3-0)
Fall, Spring, Summer.
Appreciation and understanding of visual experiences and techniques reflecting the cultural dynamics of creativity.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH1) (CC)

ART 110 Art Career Orientation 3(2-2)
As Needed.
Guided development of individual job objectives.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 115 Two-Dimensional Design 3(1-4)
As Needed.
The foundation of visual form, emphasizing two-dimensional design and color theory.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 116 Three-Dimensional Design 3(1-4)
As Needed.
The foundation of visual form, emphasizing three dimensional design.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 141 Drawing I: Observational Drawing 3(1-4)
Fall.
Development of perception and technical skills in rendering.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 176 Photography: Expressive Composition 3(2-2)
Spring.
An introduction to observational seeing through photography. The class focuses on composition within the camera frame and selecting the photographs that most effectively convey the objectives of each experiment.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 233 Sculpture I 3(1-4)
As Needed.
Basic problems in sculpture relating specific concerns of visual form and process.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

ART 234 Painting I 3(1-4)
Spring.
Introduction to painting in oil and acrylic where the control of space will be approached through the use of color.
Prerequisite: ART 115 and ART 141.
Corequisite: None.
Registration Information: Permission of instructor.

ART 242 Drawing II: Life Drawing 3(1-4)
Spring.
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.
Corequisite: None.
Registration Information: None.

ART 247 Ceramics I 3(1-4)
Fall, Spring, Summer.
Essential skills in ceramic processes; emphasis on form and function as related to students' needs and creative intent.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 270 Printmaking I 3(1-4)
As Needed.
Introduction to multiple image production utilizing relief printing including woodcut, linocut and collagraph. Introduction to shop techniques, safety procedures and history of the medium.
Prerequisite: None.
Corequisite: None.
Registration Information: Art core or permission of instructor.

ART 274 Art & Design Essentials 3(2-3)
Fall.
This course expands on the concepts of ARC 174 toward incorporating industry standard digital tool-sets into the creative process as well as exploring the dynamics of visual communication.
Prerequisite: ARC 174.
Corequisite: None.
Registration Information: None.

ART 276 Photography: Creative Lighting 3(2-3)
Fall.
Explore the fundamental characteristics of light & its effect on the photographic image. Use the 5 characteristics of light to direct every aspect of the process from basic studio sets to large scale location works.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 281 Principles of Graphic Design 3(2-3)
Spring.
Exploration of Graphic Design Theory and the Basic Principles for the effective use of color, dynamic type layout, branding & logo design as well as page & screen design.
Prerequisite: ARC 174.
Corequisite: None.
Registration Information: None.

ART 291 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ART 301 Late Twentieth-Century Aesthetics 3(3-0)
As Needed.
This course introduces the classic writings in ancient and modern philosophy theory and criticism informing American and European art of the late twentieth century.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 310 Portfolio Review 1(1-0)
As Needed.
Art majors must present a portfolio of their artwork or art history research prospectus for the art faculty to evaluate.
Prerequisite: None.
Corequisite: None.
Registration Information: Art Core.

ART 312 Medieval Art (3 V)
As Needed.
Explore the world of medieval art from ivory cosmetics cases to gargoyles. Discover the roles that art played in daily life, politics, and religion within Jewish, Christian, and Islamic contexts c. 300-1300 CE.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 314 Baroque & Rococo Art 3(3-0)
As Needed.
From Caravaggio to Chippendale, baroque and rococo art presents a feast for the senses. This course examines such topics as drama and sensuality in religious art, courtly life, depictions of the everyday, and eroticism.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 333 Sculpture II: Site Art 3(1-4)
As Needed.
Creating sculptural elements whose form and content are a response to its site and context.
Prerequisite: ART 233.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (9).

ART 334 Painting II 3(1-4)
Fall.
Techniques in oil and acrylic emphasizing the application of materials to subject matter and composition.
Prerequisite: ART 234.
Corequisite: None.
Registration Information: None.

ART 342 Drawing III 3(1-4)
Spring.
Advanced course in pursuit of increased skills of perception and artistic anatomy.
Prerequisite: ART 141 and ART 242.
Corequisite: None.
Registration Information: Repeatable (9).

ART 347 Ceramics II 3(1-4)
Fall, Spring, Summer.
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.
Corequisite: None.
Registration Information: Repeatable (9).

ART 370 Printmaking II 3(1-4)
As Needed.
Introduction to traditional and non-traditional methods of Intaglio printing including line etch, aquatint, dry point, resist methods, photo processes and color printing.
Prerequisite: ART 270.
Corequisite: None.
Registration Information: Repeatable (9).

ART 374 Motion Graphics 3(1-4)
Spring.
Students explore contemporary principles, compositing methods and industry standard software to create visual effects for video, animation and motion related projects.
Prerequisite: ART 274 or MAE 240.
Corequisite: None.
Registration Information: None.

ART 376 Photography: Digital to Darkroom 3(1-4)
As Needed.
Produce exhibition quality prints from the same historical processes that defined the very invention of photography. Experiment with 19th century recipes & precious metals to craft exquisite photographic prints.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ART 381 Strategic Branding & Advertising Design 3(2-3)
Fall.
Students focus on how design methodologies and branding influences an audience. Client relations and design communication are a primary emphasis in this process oriented course.
Prerequisite: ART 281.
Corequisite: None.
Registration Information: None.

ART 382 Methods of Character Design 3(1-4)
As Needed.
Take on the role of a character designer or illustrator by exploring the various processes and concepts that go into creating effective game characters.
Prerequisite: ART 274 or MAE 251.
Corequisite: None.
Registration Information: None.

ART 383 Exhibition Design 2(0-4)
As Needed.
Communication and design principles applied to the display of objects. Special attention to museum and gallery installations.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

ART 397 Studio Series (1-3 V)
As Needed.
Advanced studio offerings for students who have completed all other course offerings in a specific discipline. Scheduled concurrently with lower-division studios.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (9).

ART 410 Senior Career Orientation 1(1-0)
As Needed.
Formal presentation of student's portfolio or art history research to the art faculty. Senior exhibition, artist's statement, resumes and job placement interviews.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing.

ART 412 Contemporary Art (1-3 V)
As Needed.
A study of selected recent developments in the visual arts. Reading, viewing, and discussion of new developments in media, art theory and criticism.
Prerequisite: ARH 411.
Corequisite: None.
Registration Information: None.

ART 415 Exhibiting Latinx/Chicanx Art 3(1-4)
As Needed.
Examine what it means to create exhibitions of Latinx/Chicanx/Indigenous art in museums and galleries. Bridging theory and practice, the course explores the history of exhibiting Latinx/Chicanx/Indigenous Art.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ART 422 Social Art Practices 3(1-4)
As Needed.
Explore new art practices that engage with communities around them. Create and design projects that involve social interaction and participation as a mode of expression and activism.
Prerequisites: ARC 310.
Corequisites: None.
Registration Information: None.

ART 433 Advanced Site Art 3(1-4)
As Needed.
Advanced projects in Site Art that involve the presentation and creation of site specific sculptural forms.
Prerequisite: ART 333.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (9).

ART 434 Painting III 3(1-4)
Fall.
Advanced painting with an emphasis on individual development. Focus pertains to formal, pictorial and technical problems met in developed personal imagery.
Prerequisite: ART 334.
Corequisite: None.
Registration Information: Repeatable (9).

ART 442 Drawing IV 3(1-4)
Spring.
Emphasis on development of individual skills of perception and exploration of new techniques and materials.
Prerequisite: ART 342.
Corequisite: None.
Registration Information: Repeatable (9).

ART 447 Advanced Ceramics 3(1-4)
Fall, Spring, Summer.
This course explores advanced theories and techniques involved in working with clay: forming, firing, glazing, kiln design and construction.
Prerequisite: ART 274.
Corequisite: None.
Registration Information: Repeatable (9).

ART 470 Printmaking III 3(1-4)
As Needed.
Introduction to lithography printing using stones, aluminum plates and photo processes in black and white and multiple color techniques.
Prerequisite: ART 370.
Corequisite: None.
Registration Information: Repeatable (9).

ART 474 Personal Vision: Digital Art & Animation 3(1-4)
As Needed.
Project proposal and exploration course with particular emphasis on process strategies for developing dynamic creative projects and/or installations in digital art & animation.
Prerequisite: ART 374 or MAE 240 or MAE 251.
Corequisite: None.
Registration Information: Repeatable (6).

ART 476 Personal Vision: Filmworks & Photography 3(1-4)
As Needed.
Project proposal and exploration course with particular emphasis on process strategies for developing dynamic time based, film, photographic or other creative media related projects.
Prerequisite: ART 274 or ART 276 or MAE 240 or MAE 251.
Corequisite: None.
Registration Information: Repeatable (6).

ART 477 Personal Vision: Studio Arts 3(1-4)
As Needed.
Project proposal and exploration course with particular emphasis on process strategies for developing dynamic projects through traditional and non-traditional studio art practices.
Prerequisites: ARC 310.
Corequisites: None.
Registration Information: None.

ART 481 Visual Communication: Production Studio 3(1-4)
Spring.
Experience what professional designers do on a daily basis. Students will be challenged to conduct research, reflect, make, and communicate, both individually and in small teams.
Prerequisite: ART 381.
Corequisite: None.
Registration Information: Repeatable (6).

ART 482 3D Worlds & Game Environments 3(1-4)
As Needed.
Explore the rich visual history of game environments and the influences that inform their themes and styles while building the necessary components for your own unique 3D worlds.
Prerequisites: ART 274 or ME 251.
Corequisites: None.
Registration Information: None.

ART 491 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ART 494 Field Experience (1-6 V)
As Needed.
Off-campus individual experience providing transition from classroom instruction to on-the-job experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing and permission of instructor. Repeatable (6).

ART 495 Independent Study (1-5 V)
As Needed.
Individual tutorial experience. Prerequisite: Junior or senior standing and permission of instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Permission of instructor.

ART 496 Cooperative Education Placement (1-4 V)
As Needed.
Cooperative Education Placement.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

ART 497 Studio Series (1-3 V)
As Needed.
Advanced sections of studio offerings.
Prerequisite: ART 397.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

ART 500 Workshop (1-5 V)
As Needed.
Using materials and techniques based on advanced concepts and ideas.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing and permission of instructor. Repeatable (99).

ART 511 Twentieth-Century Art (1-3 V)
As Needed.
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: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

ART 512 Contemporary Art 3(3-0)
As Needed.
Advanced study in contemporary art and associated criticism, aesthetics and the philosophy of art through the end of the twentieth century.
Prerequisite: ART 212.
Corequisite: None.
Registration Information: Permission of instructor.

ART 533 Graduate Level Sculpture/Public Art 3(0-6)
As Needed.
Graduate level work in sculpture/public art including explorations in content, context, critique and techniques.
Prerequisite: None.
Corequisite: None.
Registration Information: Three semesters of undergraduate sculpture or permission of instructor. Repeatable (99).

ART 534 Graduate Painting 3(1.5-3)
As Needed.
Explore principles, theories, and techniques in contemporary painting: content/imagery, materials and paint handling, work in a series, exhibition, historical research, aesthetic discussion and critiques.
Prerequisite: ART 242 and ART 434.
Corequisite: None.
Registration Information: Admission to graduate Teacher Education Program. Repeatable (99).

ART 542 Graduate Drawing 3(1-4)
As Needed.
Professional drawing practices utilizing quality papers and display presentation.
Prerequisite: ART 412.
Corequisite: None.
Registration Information: None.

ART 547 Ceramics (1-3 V)
As Needed.
Graduate level work in clay including explorations in ceramic content, context, critique and techniques (forming, firing and glazing).
Prerequisite: None.
Corequisite: None.
Registration Information: Three semesters of undergraduate ceramics or permission of instructor. Repeatable (99).

ART 570 Graduate Printmaking 3(0-6)
As Needed.
Graduate students will develop their personal, creative approach to image making through innovative exploration of relief, intaglio or lithography.
Prerequisite: ART 470.
Corequisite: None.
Registration Information: None.

ART 574 Graduate Digital Art 3(1.5-3)
As Needed.
Explore principles, theories, and techniques in contemporary digital art: content/imagery, work in a series, exhibition, historical research, aesthetic discussion and critiques.
Prerequisite: ART 242 and ART 334 and ART 474.
Corequisite: None.
Registration Information: Admission to graduate Teacher Education Program. Advisor approval required for prerequisite equivalents. Repeatable (99).

ART 576 Graduate Photography 3(1.5-3)
As Needed.
Explore principles, theories, and techniques in contemporary photography: content/imagery, programs, appropriate media output, work in a series, exhibition, historical research, aesthetic discussion and critiques.
Prerequisite: ART 374 and ART 476.
Corequisite: None.
Registration Information: Admission to graduate Teacher Education Program or permission of instructor. Advisor approval required for prerequisite equivalence. Repeatable (99).

ART 591 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing and permission of instructor. Repeatable (99).

ART 597 Studio Series (1-3 V)
As Needed.
Graduate level studies.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

Art History (ARH)

ARH 211 Global Art I (GT-AH1) 3(3-0)
Fall.
History of art & arch. from prehistory to 1300 CE. Topics include religious & political functions of art, cross-cultural interaction, the legal, ethical, & scientific challenges of archeology, restoration, & interpretation.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH1) (CC)

ARH 212 Global Art II (GT-AH1) 3(3-0)
Spring.
Discover how cross-cultural interactions, photography, abstraction, & the artistic engagement with politics, feminism, race, and popular culture affected the artworld. art throughout the world from 1300 CE to the present.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH1) (CC)

ARH 313 Renaissance Art 3(3-0)
As Needed.
From the Mona Lisa to Michelangelo's David, many of the most famous artworks stem from the Renaissance. Learn how artists grappled with the groundbreaking political, scientific, religious, and intellectual changes that transformed Europe c. 1300-1600 CE.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ARH 316 Women in Art 3(3-0)
As Needed.
What do Artemisia Gentileschi, Yoko Ono, and Beyoncé have in common? Find out as we examine art produced by women and how women have been depicted throughout history.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ARH 317 History of Architecture 3(3-0)
As Needed.
This course explores the history of architecture throughout the world from prehistory to the present with particular emphasis on modern and contemporary trends.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ARH 318 History of Photography 3(3-0)
Fall, Odd.
Learn to see photography through a new lens as we explore technical processes, debates about retouching and photographic truth, and the many functions that photographs serve from document to fine art.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ARH 411 Theory & Methods 3(3-0)
Fall.
This course provides you with a methodological toolkit for art-related careers, familiarizing you with the major developments in art theory and criticism of the last one hundred years.
Prerequisite: ARH 212.
Corequisite: None.
Registration Information: None.

ARH 413 Native American Art 3(3-0)
As Needed.
Examine social, religious, political, and personal functions of art and architecture by indigenous peoples throughout North & South America. Learn ethical & legal issues surrounding archeology, collecting, and repatriation.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ARH 415 Latin American Art 3(3-0)
As Needed.
Delve into the art and architecture of the region currently known as Latin America. The course begins with some of the most prominent American cultures prior to the arrival of Europeans and ends in the present.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ARH 416 Art & Race in the Americas 3(3-0)
As Needed.
Discover how ideas surrounding race have informed artmaking. The course focuses on art produced from 1492 to the present and issues related to people of indigenous and African ancestry.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ARH 417 Global Encounters & Exchanges 1450-1800 3(3-0)
As Needed.
This course examines art produced in Africa, Asia, and the Americas as a result of the interaction with Europeans in the early modern period.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ARH 418 Public Art 3(3-0)
As Needed.
Investigate the history, functions, and challenges of public art. Among other assignments, you will gain first-hand experience with public art as you design, organize, and hold a community art event.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

Athletic Training (AT)

AT 230 CPR & Sudden Illness & Injury Recognition 1(0.5-0.5)
As Needed.
This course will provide knowledge and skills for CPR and sudden Illness and injury recognition for the Lay Professional. This course in not appropriate for students majoring in EXPER, Health Science, or Nursing.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AT 232 First Aid 2(1-1)
Fall, Spring, Summer.
Knowledge and skills in current first-aid and CPR procedures for the Lay Responder. First-aid and CPR certification will be earned in this class.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AT 234 Emergency Care 2(1-2)
Fall, Summer.
Study of emergency care of injuries/illnesses, including the assessment of vital signs, splinting and emergency transport. Overview of injuries/illnesses associated with sudden death.
Prerequisite: AT 232 and AT 260.
Corequisite: None.
Registration Information: None.

AT 260 Injury/Illness Care and Prevention 3(2-2)
Fall, Spring.
Study of prevention and care of injuries and illnesses commonly sustained in an active population.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AT 291 Special Topics (1-5 V)
Fall, Spring.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of Instructor. Repeatable (99).

AT 301 Physical Assessment 3(2-2)
Fall, Spring.
Study of physical assessments including bone/soft tissue palpations, vital signs, goniometry, manual muscle testing, neurological testing, postural assessment, functional movement screening and documentation of results.
Prerequisite: BIOL 223 and BIOL 223L and BIOL 224 and BIOL 224L.
Corequisite: None.
Registration Information: None.

AT 323 Functional Exercise Training 2(1-2)
Spring.
Course applications include exercise program design, aspects of functional training, and components of various types of exercise regimens as related to injury prevention and recovery.
Prerequisite: EPER 364.
Corequisite: None.
Registration Information: None.

AT 494 Field Experience (1-5 V)
As Needed.
Learning experience to be conducted in athletic training related clinical environment and supervised by the athletic training education program.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of program director. Repeatable (99).

AT 495 Independent Study (1-5 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of program director. Repeatable (99).

AT 501 Foundations of Athletic Training 3(2-2)
Summer.
Study of foundational knowledge and clinical skills in athletic training.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance into the MS in AT Program.

AT 502 Functional Anatomy of Injury 3(2-2)
Summer.
Study of anatomical aspects of musculoskeletal, vascular and peripheral nervous system injuries. Exploration of anatomical joint design and function, focusing on how injury etiology impacts trunk and extremity integrity.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance into the MS in AT Program.

AT 503 Fundamentals of Public Health 1(1-0)
Summer.
Foundations of public health as it relates to athletic training, includes the history and current structure of public health, essential services, and national and professional organizations of public health society.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance in MS in AT program.

AT 504 Concepts of Therapeutic Interventions 3(2-2)
Summer.
Instruction on the concepts for the use of therapeutic modalities and rehabilitation in the management of injuries, including the application of select therapeutic modalities and rehabilitation skills.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance into MS in AT Program.

AT 510 Clinical Integration I 2(2-0)
Fall.
The clinical integration of knowledge and skills of athletic training in various clinical settings, under the direction of an assigned clinical preceptor.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance into the MSAT Program required.

AT 511 Assessment & Management I 4(2-4)
Fall.
Study of pathomechanics, assessment and early therapeutic intervention of the lower extremity. Evidence-based assessment and Phase I & II intervention techniques for sound clinical decision making based on patient's needs.
Prerequisite: AT 501 and AT 504.
Corequisite: None.
Registration Information: Acceptance into MS in AT Program.

AT 513 Professionalism and Ethics 1(1-0)
Fall.
Study of the professional and ethical behaviors of the certified athletic trainer.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AT 514 Research Methods 2(2-0)
Summer.
Study of the research process and evidence based practice in athletic training. Course will consist of evaluation of available research evidence quality and interpret statistical data and relevance.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance into MS in Athletic Training Program.

AT 520 Clinical Integration II 3(3-0)
Spring.
The clinical integration of knowledge and skills of athletic training in the clinical environment, under the direction of a clinical preceptor.
Prerequisite: AT 510.
Corequisite: None.
Registration Information: None.

AT 521 Assessment and Management II 4(2-4)
Spring.
Study of pathomechanics, assessment, and therapeutic intervention of the upper extremity. Use of evidence based assessment and intervention techniques for sound clinical decision making based on patient's needs.
Prerequisite: AT 511.
Corequisite: None.
Registration Information: None.

AT 522 General Medical Conditions 5(4-2)
Fall.
Study of general medical conditions and recognition and appropriate intervention of disorders affecting socio-cultural, mental, emotional and physical behaviors of those under the care of the athletic trainer.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance into the MS in Athletic Training Program.

AT 530 Clinical Integration III 2(2-0)
Summer.
A general medical specific clinical integration. Students will be responsible for obtaining a family practice or internal medicine physician to serve as their clinical preceptor.
Prerequisite: AT 520.
Corequisite: None.
Registration Information: Approval of program director.

AT 531 Assessment & Management III 3(2-2)
Fall.
Study of pathomechanics, assessment, and therapeutic intervention of the head, neck and spine. Use of evidence based assessment and intervention techniques for sound clinical decision making based on patient's needs.
Prerequisite: AT 521.
Corequisite: None.
Registration Information: Acceptance to MS in AT Program.

AT 533 Fundamentals of Epidemiology 1(1-0)
Fall.
Understanding of health risk and injury. Topics include history of epidemiology and population health, epidemiological study design and population health data tracking in the US as it relates to athletic training.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance in MS in AT program.

AT 534 Rehabilitation in Athletic Training 4(3-2)
Spring.
Learning of skills and techniques to design and implement rehabilitation for musculoskeletal injuries. Understand and demonstrate the progression of clients to safe return to desired level of physical activity.
Prerequisites: AT 511.
Corequisites: None.
Registration Information: Acceptance into the MS in Athletic Training Program.

AT 535 Pharmacology in Athletic Training 1(1-0)
Spring.
Study of pharmacological use in athletic training, including pharmacodynamics, pharmacokinetics, indications, contraindications, dosing, interactions, and adverse reactions.
Prerequisites: AT 522.
Corequisites: None.
Registration Information: Acceptance in the MS in Athletic Training Program.

AT 540 Clinical Integration IV 4(4-0)
Fall.
The clinical integration of knowledge and skills of athletic training in the clinical environment, under the direction of a clinical preceptor.
Prerequisite: AT 530.
Corequisite: None.
Registration Information: None.

AT 542 Administration in Athletic Training 3(3-0)
Fall.
Study of planning, coordinating and supervising administrative components of athletic training, including those pertaining to health care, financial, personnel, facilities management and public relations.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AT 545 Evidence-Based Practice & Research 3(3-0)
Fall.
Develops clinical reasoning skills and application of evidence-based resources to problem-solve as clinicians in an interdisciplinary health care team.
Prerequisite: AT 514.
Corequisite: None.
Registration Information: None.

AT 550 Clinical Integration V 5(5-0)
Spring.
The clinical integration of knowledge and skills of athletic training in the clinical sitting under the direction of a as clinical preceptor. This is a full immersion clinical experience.
Prerequisite: AT 540.
Corequisite: None.
Registration Information: None.

AT 551 BOC Test Prep 1(1-0)
Spring.
This course involves assessment of the student's current status of preparation for the BOC exam. Guidance for reviewing the knowledge and skills content of NATA educational competencies and study plan development.
Prerequisite: None.
Corequisite: None.
Registration Information: Enrollment in last semester of MSAT Program required.

AT 592 Research (1-5 V)
Spring.
Group research project in athletic training conducted in collaboration with an athletic training faculty member. Literature review, proposal, data collection, data analysis, and poster presentation.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of Athletic Training faculty.
Repeatable (3).

Automotive Industry Management (AIM)

A grade of C or better is required for prerequisite courses.

AIM 105 AIM and College Life 1(1-0)
Fall, Spring.
Introduction to the industry from viewpoint of history, social impact, and future growth. Provide student exposure to AIM program policies and procedures, campus resources and college life.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AIM 110 Automotive Otto-Cycle Engines I MLR 1(1-0)
Fall.
Design and operational theory of Otto cycle automotive gasoline engines.
Prerequisites: None.
Corequisites: AIM 110L.
Registration Information: None.

AIM 110L Automotive Otto-Cycle Engines I MLR Lab 2(0-4)
Fall.
Practical experience with MLR related engine tasks focusing on compression, lubrication, cooling system and camshaft/timing belt service.
Prerequisites: None.
Corequisites: AIM 110.
Registration Information: None.

AIM 120 Automotive Electrical Systems I MLR 2(2-0)
Fall.
Design, theory and operation of electrical/electronic fundamentals including Ohm's law, series & parallel circuits, AC, DC, engine electrical systems; battery, starting, charging and inclusive of accessory system.
Prerequisite: None.
Corequisite: AIM 120L.
Registration Information: None.

AIM 120L Automotive Electrical Systems I Lab MLR 2(0-4)
Fall.
Practical experience with MLR-related automotive electrical systems service focused on engine electrical systems; battery, starting, charging and inclusive of accessory electrical systems.
Prerequisite: None.
Corequisite: AIM 120.
Registration Information: None.

AIM 130 Automotive Brake Systems MLR 1(1-0)
Spring.
Design and operational theory of automotive brake systems.
Prerequisite: None.
Corequisite: AIM 130L.
Registration Information: None.

AIM 130L Automotive Brake Systems MLR Lab 2(0-4)
Spring.
Practical experience with MLR-related automotive brake systems service.
Prerequisite: None.
Corequisite: AIM 130.
Registration Information: None.

AIM 155 Automotive Parts Operations 4(4-0)
As Needed.
Study of automotive industry management theory and styles of store operations including customer service skills, associate interaction, managerial responsibilities. Product and parts catalog knowledge/ advertising.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AIM 160 Automotive Manual Transmissions & Drive Lines MLR 1(1-0)
Spring.
Design and operational theory of manually shifted helical geared transmissions, clutches & remaining drive line including final drives.
Prerequisite: None.
Corequisite: AIM 160L.
Registration Information: None.

AIM 160L Auto Manual Transmissions & Drive Line MLR Lab 1(0-2)
Spring.
Practical experience with MLR-related automotive automatic transmission service.
Prerequisite: None.
Corequisite: AIM 160.
Registration Information: None.

AIM 210 Automotive Engine Performance MLR 2(2-0)
Fall.
Design, theory and operation of gasoline engine performance related to: compression, volumetric efficiency, thermal efficiency, operating temperature, ignition timing, air/fuel mixture ratio and exhaust emissions.
Prerequisite: AIM 110 and AIM 110L and AIM 120 and AIM 120L.
Corequisite: AIM 210L.
Registration Information: None.

AIM 210L Automotive Engine Performance MLR Lab 2(0-4)
Fall.
Practical experience with MLR-related automotive engine performance service.
Prerequisite: AIM 110 and AIM 110L and AIM 120 and AIM 120L.
Corequisite: AIM 210.
Registration Information: None.

AIM 220 Automotive Electrical Systems II MLR/AST 2(2-0)
Spring.
Theory, design and operation of digital/electronic managed automotive systems including OBD II, engine, drive train, brakes, vehicle stability, traction control, accessories and HVAC.
Prerequisite: AIM 120 and AIM 120L.
Corequisite: AIM 220L.
Registration Information: None.

AIM 220L Automotive Electrical Systems II MLR/AST Lab 2(0-4)
Spring.
Practical experience with automotive electrical systems service focused digital/electronic management systems related to OBD II, engine, drive train, brakes, vehicle stability, traction control, OBD II, accessories, HVAC.
Prerequisite: AIM 120 and AIM 120L.
Corequisite: AIM 220.
Registration Information: None.

AIM 230 Automotive Suspension & Steering Systems MLR 1(0-1)
Spring.
Design and operational theory of automotive suspension and steering systems.
Prerequisite: None.
Corequisites: AIM 230L.
Registration Information: None.

AIM 230L Automotive Suspension & Steering Systems MLR Lab 2(0-4)
Spring.
Practical experience with MLR-related automotive suspension & steering service.
Prerequisite: None.
Corequisites: AIM 230.
Registration Information: None.

AIM 260 Automotive Automatic Transmission/Transaxles MLR 1(1-0)
Spring.
Design and operational theory of automotive planetary geared automatic transmissions.
Prerequisite: AIM 160 and AIM 160L.
Corequisites: AIM 260L.
Registration Information: None.

AIM 260L Auto Automatic Transmission/Transaxle MLR Lab 1(0-2)
Spring.
Practical experience with MLR-related planetary geared automatic transmission/transaxle service.
Prerequisite: AIM 160 and AIM 160L.
Corequisites: AIM 260.
Registration Information: None.

AIM 265 Automotive Parts Management Systems 4(3-2)
As Needed.
Introduce students to aftermarket store operations, inventory and distribution management. Emphasis is on hands-on store operations, business contacts, job placement and internship.
Prerequisite: AIM 105 and AIM 155.
Corequisite: None.
Registration Information: None.

AIM 296 Cooperative Education Placement (1-5 V)
Fall, Spring.
Supervised industrial field work.
Prerequisite: None.
Corequisite: None.
Registration Information: AIM major only.

AIM 305 Regulatory, Enviro, Health Issues 3(3-0)
As Needed.
A study of automotive regulatory issues to include, OSHA, SDS, RTK, health and environmental issues.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AIM 325 Fuels & Lubrication Prod, Market, & Conservation 3(3-0)
As Needed.
Petroleum industry; basic production processes, marketing techniques, alternate fuel sources, and conservation techniques.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AIM 345 Advanced Automotive Systems 5(3-4)
As Needed.
Theory and lab experience on new concepts in automotive electrical, fuel and suspension systems.
Prerequisite: AIM 125 and AIM 125L and AIM 165 and AIM 165L and AIM 235 and AIM 235L and AIM 255 and AIM 255L.
Corequisite: None.
Registration Information: None.

AIM 355 Automotive Shop Practices 5(2-6)
Spring.
Diagnosis of electrical, fuel, engine, brake and transmission systems; study of service management and service writer duties.
Prerequisite: AIM 125 and AIM 125L and AIM 165 and AIM 165L and AIM 235 and AIM 235L and AIM 255 and AIM 255L and AIM 345.
Corequisite: None.
Registration Information: None.

AIM 405 Personal Selling Methods and Techniques 4(3-2)
As Needed.
Research, preparation and presentation methods and techniques for selling in the automotive milieu.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

AIM 425 Automotive Financial Management 5(4-2)
As Needed.
Introduction to dealership operations, financial management and analysis of OEM. Emphasis to develop experience through job placement and internship.
Prerequisite: AIM 155 and AIM 265.
Corequisite: None.
Registration Information: None.

AIM 490 Special Projects (1-5 V)
As Needed.
Special interest area.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (10).

AIM 491 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (10).

AIM 495 Independent Study (1-4 V)
As Needed.
Directed, independent study of topics agreed upon by the student and instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (10).

AIM 496 Cooperative Education Placement (1-5 V)
As Needed.
Supervised industrial field work.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. AIM major only. Repeatable (10).

Biology (BIOL)

BIOL 100 Principles of Biology (GT-SC2) 3(3-0)
Fall, Spring, Summer.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 100L.
(Gen Ed: ST, GT-SC2)

BIOL 100L Principles of Biology Lab (GT-SC1) 1(0-2)
Fall, Spring, Summer.
To expose the student to problem-solving skills emphasizing the importance of observation and data accumulation.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 100.
(Gen Ed: ST, GT-SC1)

BIOL 112 Nutrition 3(3-0)
Fall, Spring, Summer.
Analysis of personal dietary habits and behavior in relation to basic human nutritional needs and food composition.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BIOL 121 Environmental Conservation (GT-SC2) 3(3-0)
Fall, Spring, Summer.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 121L.
(Gen Ed: ST, GT-SC2)

BIOL 121L Environmental Conservation Lab (GT-SC1) 1(0-2)
Fall, Spring, Summer.
Field studies to accompany BIOL 121.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 121.
(Gen Ed: ST, GT-SC1)

BIOL 171 First Year Seminar 1(1-0)
Fall, Spring.
Biology majors entering the program are provided guidance on studying and skills specific to science. Biological career diversity and planning for degree completion are discussed.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BIOL 181 College Biology I/Organismal Bio (GT-SC2) 3(3-0)
Fall, Spring.
Biological diversity and structure-function relationships, evolution and ecology.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 181L.
(Gen Ed: ST, GT-SC2)

BIOL 181L College Biology I/Organismal Bio Lab (GT-SC1) 1(0-2)
Fall, Spring.
College Biology I/Organismal Bio Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 181.
(Gen Ed: ST, GT-SC1)

BIOL 182 College Biology II/Cellular Biology (GT-SC2) 3(3-0)
Fall, Spring.
Continuation of BIOL 181. Basic cell structure and function, reproduction and heredity.
Prerequisite: BIOL 181 and CHEM 111 or CHEM 121.
Corequisite: None.
Registration Information: Co-enrollment in BIOL 182L or BIOL 184L recommended.
(Gen Ed: ST, GT-SC2)

BIOL 182L College Biology II/Cellular Bio Lab (GT-SC1) 1(0-2)
Fall, Spring.
College Biology II/Cellular Bio Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 182.
(Gen Ed: ST, GT-SC1)

BIOL 183 College Biology I Recitation 1(1-0)
As Needed.
Critical thinking for College Biology I topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 181.

BIOL 184 College Biology II Recitation 1(1-0)
As Needed.
Critical thinking for College Biology II topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 182.

BIOL 184L Phage Discovery 2(0-4)
Fall.
Research based introductory course where students find and identify new bacteriophage.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 182.

BIOL 201 Botany (GT-SC2) 2(2-0)
Spring.
Forms, basic structures, relationships, life histories and evolutionary trends of representatives of the major autotrophic plant groups.
Prerequisite: BIOL 181 and BIOL 181L.
Corequisite: BIOL 201L.
Registration Information: None.
(Gen Ed: ST, GT-SC2)

BIOL 201L Botany Laboratory (GT-SC1) 2(0-4)
Spring.
Botany Laboratory.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend prerequisites BIOL 181 and BIOL 181L and BIOL 182 and BIOL 182L. Recommend co-enrollment in BIOL 201.
(Gen Ed: ST, GT-SC1)

BIOL 202 Zoology 2(2-0)
Fall, Spring.
Study of anatomy, physiology, evolution, ecology, and biodiversity of invertebrates and vertebrates.
Prerequisite: BIOL 181 and BIOL 181L.
Corequisite: None.
Registration Information: Recommend c-enrollment in BIOL 202L.
Permission of instructor.
(Gen Ed: ST)

BIOL 202L Zoology Laboratory 2(0-4)
Fall, Spring.
Zoology Laboratory.
Prerequisite: BIOL 181 and BIOL 181L.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 202.
Permission of instructor.
(Gen Ed: ST)

BIOL 203 Zoology Recitation 1(1-0)
As Needed.
Recitation to accompany BIOL 202.
Prerequisite: None.
Corequisite: BIOL 202.
Registration Information: Permission of instructor.

BIOL 206 Introduction to Microbiology 3(3-0)
Fall, Spring, Summer.
For students of nursing and allied health. Applied aspects of medical microbiology.
Prerequisite: BIOL 100 and BIOL 100L or BIOL 223 and BIOL 223L; CHEM 111 and CHEM 111L.
Corequisite: BIOL 206L.
Registration Information: Permission of instructor.

BIOL 206L Introduction to Microbiology Lab 1(0-3)
Fall, Spring, Summer.
Introduction to Microbiology Lab.
Prerequisite: BIOL 100 and BIOL 100L or BIOL 223 and BIOL 223L; CHEM 111 and CHEM 111L.
Corequisite: BIOL 206.
Registration Information: Permission of instructor.

BIOL 220 Medical Terminology 2(2-0)
Spring.
Basic prefixes, word roots, combining forms and suffixes of medical terminology and human anatomy are covered, including pronunciation and patient charting.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BIOL 223 Human Physiology and Anatomy I (GT-SC2) 3(3-0)
Fall, Spring, Summer.
Thorough understanding of the functional/structural aspects of the human body. Topics include body orientation, physiologically important molecules, cell, tissues, integument, skeleton, muscle, nervous system, and senses.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 223L.
(Gen Ed: ST, GT-SC2)

BIOL 223L Human Physiology and Anatomy I Lab (GT-SC1) 1(0-2)
Fall, Spring, Summer.
Human Physiology and Anatomy I Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 223.
(Gen Ed: ST, GT-SC1)

BIOL 224 Human Physiology and Anatomy II (GT-SC2) 3(3-0)
Fall, Spring, Summer.
Structure and function of the human body. Topics include endocrine systems, respiration, digestion, metabolism, excretion, fluid-electrolyte balance, cardiovascular and reproductive functions and special senses.
Prerequisite: BIOL 223.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 224L.
(Gen Ed: ST, GT-SC2)

BIOL 224L Human Physiology and Anatomy II Lab (GT-SC1) 1(0-2)
Fall, Spring, Summer.
Human Physiology and Anatomy II Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 224.
(Gen Ed: ST, GT-SC1)

BIOL 291 Special Topics (1-4 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

BIOL 292 Research (1-3 V)
As Needed.
Faculty directed research project for undergraduate student.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of department chair. Repeatable (3).

BIOL 294 Field Experience (1-4 V)
As Needed.
Volunteer work experience under program director, department coordinator and faculty supervisor.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

BIOL 301 General Microbiology 3(3-0)
Fall, Spring.
Introduction to the bacteria and viruses, including microbial genetics and physiology.
Prerequisite: BIOL 182 and BIOL 182L and CHEM 301 and CHEM 301L.
Corequisite: BIOL 301L.
Registration Information: Permission of the instructor.

BIOL 301L General Microbiology Lab 2(0-4)
Fall, Spring.
General Microbiology Lab.
Prerequisite: BIOL 182 and BIOL 182L and CHEM 301 and CHEM 301L.
Corequisite: BIOL 301.
Registration Information: Permission of the instructor.

BIOL 302 Medical Microbiology 2(2-0)
Spring, Odd.
Survey of pathogenic bacteria, viruses and fungi.
Prerequisite: BIOL 206 or BIOL 301.
Corequisite: BIOL 302L.
Registration Information: None.

BIOL 302L Medical Microbiology Lab 2(0-4)
Spring, Odd.
Medical Microbiology Lab.
Prerequisite: BIOL 206L or BIOL 301L.
Corequisite: BIOL 302.
Registration Information: None.

BIOL 312 Cell Biology 3(3-0)
Fall, Spring.
Structure and function of the cell, life cycle of the cell, protein synthesis and trafficking, cell signaling and specialization.
Prerequisites: BIOL 182 and CHEM 122.
Corequisites: BIOL 312L.
Registration Information: None.

BIOL 312L Cell Biology Laboratory 1(0-3)
Fall, Spring.
Cell Biology Laboratory.
Prerequisites: BIOL 182L and CHEM 122L.
Corequisites: BIOL 312.
Registration Information: None.

BIOL 321 Comparative Vertebrate Anatomy 3(3-0)
Spring.
Comparative study of developmental and functional anatomy of vertebrate animals.
Prerequisite: BIOL 202 and BIOL 202L.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 321L.

BIOL 321L Comparative Vertebrate Anatomy Lab 2(0-4)
Spring.
Comparative Vertebrate Anatomy Lab.
Prerequisite: BIOL 202 and BIOL 202L.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 321.

BIOL 350 Mendelian and Population Genetics 2(2-0)
Fall, Spring.
Survey of basic Mendelian genetics, genetic mapping and population genetics.
Prerequisite: BIOL 182 and MATH 120.
Corequisite: None.
Registration Information: None.

BIOL 351 Molecular Biology & Genetics 3(3-0)
Fall, Spring.
Study of the molecular flow of genetic information, gene regulation and cancer genetics.
Prerequisite: BIOL 350 and CHEM 122 and CHEM122L.
Corequisite: None.
Registration Information: None.

BIOL 351L Molecular Biology & Genetics Laboratory 2(0-4)
Spring.
Molecular biology and bioinformatic investigations of gene function and expression.
Prerequisite: BIOL 182 and BIOL 182L.
Corequisite: BIOL 351.
Registration Information: Permission of instructor.

BIOL 352 Evolutionary Biology and Ecology 3(3-0)
Fall, Spring.
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 and BIOL 181L and BIOL 182 and BIOL182L.
Corequisite: None.
Registration Information: BIOL 350 recommended as prerequisite.

BIOL 378 Laboratory in Teaching Biology 1(0-2)
As Needed.
Laboratory preparation, safety, instruction and methods under the guidance and supervision on an instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Secondary teaching concentration. Approval of department chair. Repeatable (99).

BIOL 392 Research 1(0-4-6)
Fall, Spring, Summer.
Faculty directed research project for undergraduate student.
Prerequisite: None.
Corequisite: None.
Registration Information: Students must have either taken 1 credit of BIOL 292, equivalent research experience (e.g. CBASE/Discovery Scholars, research at a different school, REUs, etc.), or have junior/senior standing. Approval of research faculty required. Repeatable (3).

BIOL 394 Field Experience (1-4 V)
As Needed.
Volunteer work experience under program director, program coordinator, and faculty supervisor.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

BIOL 401 Microbiology 3(3-0)
Fall, Spring.
Introduction to the bacteria and viruses, including cell structure, microbial genetics and physiology.
Prerequisites: BIOL 182 and BIOL 182L and CHEM 301 and CHEM 301L.
Corequisites: BIOL 401L.
Registration Information: None.

BIOL 401L Microbiology Laboratory 1(0-3)
Fall, Spring.
General Microbiology Laboratory. Prerequisites: BIOL 182 and BIOL 182L and CHEM 301 and CHEM 301L.
Corequisites: BIOL 401.
Registration Information: None.

BIOL 402 Immunology 3(3-0)
Spring.
Cellular and molecular interactions and principles of innate and adaptive immunity including immune disorders, hypersensitivity, autoimmunity, infections, and cancer.
Prerequisite: BIOL 206 or BIOL 301 or BIOL 302 or BIOL 401.
Corequisite: None.
Registration Information: Recommend BIOL 351 as prerequisite.

BIOL 403 Virology 3(3-0)
Fall, Even.
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 BIOL 351.
Corequisite: None.
Registration Information: None.

BIOL 403L Virology Lab 1(0-2)
Fall.
Virology Lab.
Prerequisite: BIOL 301 and BIOL 301L and BIOL 351.
Corequisite: BIOL 403.
Registration Information: Permission of instructor.

BIOL 412 Advanced Cellular Biology 3(3-0)
Spring.
Advanced investigations of the structural and functional organization of the cell, life cycles of cells, intracellular digestion, protein synthesis and cell death.
Prerequisite: BIOL 301 and BIOL 301L and BIOL 351 and CHEM 301 and CHEM 301L.
Corequisite: BIOL 412L.
Registration Information: CHEM 302 and 302L strongly recommended as pre or corequisite.

BIOL 412L Advanced Cellular Biology Lab 1(0-3)
Spring.
Advanced Cellular Biology Lab.
Prerequisite: BIOL 301 and 301L and BIOL 351 and CHEM 301 and CHEM 301L.
Corequisite: BIOL 412.
Registration Information: CHEM 302 and 302L are strongly recommended pre or corequisites.

BIOL 413 Plant Physiology 2(2-0)
Spring, Odd.
Thorough examination of general physiology and function of plant body systems.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend prerequisites of BIOL 201 and BIOL 201L and CHEM 301 and CHEM 301L. Recommend co-enrollment in BIOL 413L.

BIOL 413L Plant Physiology Lab 2(0-4)
Spring, Odd.
Plant Physiology Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend prerequisites of BIOL 201 and BIOL 201L and CHEM 301 and CHEM 301L. Recommend co-enrollment in BIOL 413.

BIOL 414 Vertebrate Physiology 3(3-0)
Fall.
General physiology and the functions of animal and human body systems.
Prerequisite: BIOL 202 and BIOL 202L.
Corequisite: None.
Registration Information: CHEM 301 and CHEM 301L and MATH 156 strongly recommended as prerequisite. Recommend co-enrollment in BIOL 414L.

BIOL 414L Vertebrate Physiology Lab 1(0-2)
Fall.
Vertebrate Physiology Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommended co-enrollment in BIOL 414.

BIOL 415 Medical Physiology 3(3-0)
Fall.
Medical physiology focusing on human body systems and their regulation, disorders, diagnosis, and treatments. Includes circulatory, respiratory, endocrine, nervous, muscular, digestive, reproductive, and urinary.
Prerequisites: BIOL 202 and BIOL 202L and CHEM 301 and CHEM 301L.
Corequisites: None.
Registration Information: Must be Junior or Senior level.

BIOL 421 Histology 2(2-0)
Spring, Odd.
A microscopic study of vertebrate tissues and organs.
Prerequisite: BIOL 182 and BIOL 182L and CHEM 122 and CHEM 122L.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 421L.

BIOL 421L Histology Lab 2(0-4)
Spring, Odd.
Histology Lab.
Prerequisite: BIOL 182 and 182L and CHEM 122 and CHEM 122L.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 421.

BIOL 422 Neurobiology 3(3-0)
Spring, Even.
Fundamentals of neuroscience, cellular and molecular signaling in the nervous system, electrophysiological properties of neurons, sensory and motor systems, and cellular mechanisms of cognition.
Prerequisite: BIOL 351.
Corequisite: None.
Registration Information: None.

BIOL 432 Developmental Biology 2(2-0)
As Needed.
Theory and principles of the development of representative vertebrate and invertebrate animals, with particular emphasis on the frog, chick, and Drosophila.
Prerequisite: BIOL 351.
Corequisite: BIOL 432L.
Registration Information: None.

BIOL 432L Developmental Biology Lab 2(0-4)
As Needed.
Developmental Biology Lab.
Prerequisite: None.
Corequisite: BIOL 432.
Registration Information: None.

BIOL 440 Advanced Biotechniques 2(2-0)
Fall, Odd.
Advanced lab covering cellular/molecular techniques and instrumentation. May include Flow cytometry, advanced microscopy, molecular cloning, CRISPR, Western blots, quantitative PCR, and next generation sequencing.
Prerequisite: BIOL 301 and BIOL 301L and BIOL 351.
Corequisite: BIOL 440L.
Registration Information: None.

BIOL 440L Advanced Biotechniques Lab 2(0-2)
Fall, Odd.
Advanced laboratory-based class covering important cellular/molecular techniques and instruments. Topics include Flow cytometry, Advanced Microscopy, Molecular Cloning, CRISPR, Western Blots, and Quantitative PCR.
Prerequisite: BIOL 301 and BIOL 301L and BIOL 351.
Corequisite: BIOL 440.
Registration Information: None.

BIOL 441 Freshwater Invertebrate Zoology 2(2-0)
Spring, Odd.
Classification, phylogeny, systematics, morphology, physiology, and natural history of freshwater invertebrates inclusive of insects.
Prerequisite: None.
Corequisite: BIOL 441L.
Registration Information: BIOL 202 and 202L recommended as prerequisites.

BIOL 441L Freshwater Invertebrate Zoology Lab 2(0-4)
Spring, Odd.
Freshwater Invertebrate Zoology Lab.
Prerequisite: None.
Corequisite: BIOL 441.
Registration Information: None.

BIOL 443 Limnology 2(2-0)
Spring, Even.
Biology, chemistry and physics of lakes and rivers.
Prerequisite: None.
Corequisite: None.
Registration Information: Co-enrollment in BIOL 443L strongly recommended.

BIOL 443L Limnology Lab 2(0-4)
Spring, Even.
Limnology Lab.
Prerequisite: None.
Corequisite: BIOL 443.
Registration Information: None.

BIOL 448 Biological Statistics 3(3-0)
As Needed.
This course is an undergraduate class stacked from an already approved graduate course, BIOL 548.
Prerequisite: MATH 156.
Corequisite: None.
Registration Information: None.

BIOL 452 Advanced Microscopy 2(2-0)
As Needed.
Theory and application of microscopy to the biological sciences. Includes preparation of cells and tissues for examination, scope, operation, and image analysis.
Prerequisite: None.
Corequisite: BIOL 452L.
Registration Information: Strongly recommend BIOL 301 and 301L as prerequisites.

BIOL 452L Advanced Microscopy Lab 2(0-4)
As Needed.
Advanced Microscopy Lab.
Prerequisite: None.
Corequisite: BIOL 452.
Registration Information: Strongly recommend BIOL 301 and 301L as prerequisites.

BIOL 453 Ecology 2(2-0)
Fall, Even.
Interrelationships among organisms and their environment, employing quantitative methods and conceptual models.
Prerequisite: None.
Corequisite: BIOL 453L.
Registration Information: Strongly recommended BIOL 352, and MATH 126 and MATH 221 as prerequisites.

BIOL 453L Ecology Field Studies 2(0-4)
Fall, Even.
Ecology Field Studies.
Prerequisite: None.
Corequisite: BIOL 453.
Registration Information: None.

BIOL 454 Behavioral Ecology 3(3-0)
Fall, Odd.
Evolution and adaptive significance of animal behaviors with a focus on current research.
Prerequisite: BIOL 202.
Corequisite: None.
Registration Information: None.

BIOL 460 Survey of Genomics & Bioinformatics 3(3-0)
As Needed.
Theory and practice of genome analysis including use of statistics, databases and biomolecular sequence analysis software.
Prerequisite: BIOL 351.
Corequisite: None.
Registration Information: None.

BIOL 461 Applied Geospatial Technology (GIS/GPS) 3(2-2)
Fall, Odd.
Theory and practice of using Geographic Information Systems (GIS) and Global Positioning Systems (GPS) for geographic data analysis, and to georeference data.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing.

BIOL 462 Environmental Policy & Management 3(3-0)
Spring, Odd.
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.
Corequisite: None.
Registration Information: None.

BIOL 465 Environmental Toxicology 3(3-0)
Fall, Even.
Basic principles of toxicology, interaction of xenobiotics with living organisms and the environment, and the impact of pollutants on the ecosystem.
Prerequisite: BIOL 181 and BIOL 181L and BIOL 182 and BIOL 182L.
Corequisite: None.
Registration Information: CHEM 302 and CHEM 302L strongly recommended as prerequisite.

BIOL 473 Med. Tech. Clinical Rotation I 12(5-14)
As Needed.
Coursework and clinical training in an affiliated medical laboratory sciences facility. Specific course of study determined by facility.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

BIOL 474 Med. Tech. Clinical Rotation II 12(5-14)
As Needed.
Coursework and clinical training in an affiliated medical laboratory sciences facility. Specific course of study determined by facility.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

BIOL 475 Med. Tech. Clinical Rotation III 6(3-6)
As Needed.
Coursework and clinical training in an affiliated medical laboratory sciences facility. Specific course of study determined by facility.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

BIOL 479 Ichthyology 2(2-0)
Fall, Odd.
The morphology, taxonomy and ecology of fishes; an introduction to fishery biology and aquaculture.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 479L.

BIOL 479L Ichthyology Laboratory 1(0-2)
Fall, Odd.
Ichthyology Laboratory.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 479.

BIOL 481 Entomology 2(2-0)
Fall, Odd.
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 and BIOL 202L.
Corequisite: BIOL 481L.
Registration Information: None.

BIOL 481L Entomology Lab 1(0-2)
Fall, Odd.
Entomology Lab.
Prerequisite: None.
Corequisite: BIOL 481.
Registration Information: None.

BIOL 482 Herpetology 2(2-0)
Fall, Even.
Diversity, anatomy, physiology, evolution, and ecology of reptiles of amphibians. Emphasis will be placed on novel evolutionary adaptations within the major taxa.
Prerequisite: BIOL 202 and BIOL 202L.
Corequisite: BIOL 482L.
Registration Information: None.

BIOL 482L Herpetology Lab 1(0-2)
Fall, Even.
Herpetology Lab.
Prerequisite: BIOL 202 and BIOL 202L.
Corequisite: BIOL 482.
Registration Information: None.

BIOL 483 Mammalogy 2(2-0)
Spring, Even.
Evolution, classification and biology of mammals; practice in identifying and preparing specimens.
Prerequisite: BIOL 202.
Corequisite: BIOL 483L.
Registration Information: None.

BIOL 483L Mammalogy Lab 1(0-2)
Spring, Even.
Mammalogy Lab.
Prerequisite: BIOL 202.
Corequisite: BIOL 483.
Registration Information: None.

BIOL 484 Ornithology 2(2-0)
Spring, Odd.
Classification, life history, laboratory and field identification of birds.
Prerequisite: BIOL 202.
Corequisite: BIOL 484L.
Registration Information: None.

BIOL 484L Ornithology Lab 1(0-2)
Spring, Odd.
Ornithology Lab.
Prerequisite: BIOL 202.
Corequisite: BIOL 484.
Registration Information: None.

BIOL 485 Plant Taxonomy 2(2-0)
As Needed.
Identification of the common vascular plant families of Colorado with an emphasis on the flowering plants; study of their systematic relationships.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommended BIOL 201 and 201L as prerequisite. Recommend co-enrollment in BIOL 485L.

BIOL 485L Plant Taxonomy Lab 2(0-4)
As Needed.
Plant Taxonomy Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend BIOL 201 and 201L as prerequisite. Recommend co-enrollment in BIOL 485.

BIOL 486 Field Botany 3(3-0)
As Needed.
Principles and applications of field techniques used in vegetation assessment, surveys, and vegetation monitoring.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommended BIOL 201 and BIOL 201L.

BIOL 491 Special Topics (1-4 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

BIOL 492 Research 1(0-4-6)
Fall, Spring, Summer.
Faculty directed research project for undergraduate student.
Prerequisite: None.
Corequisite: None.
Registration Information: Students must have either taken 1 credit of BIOL 292, equivalent research experience (e.g. CBASE/Discovery Scholars, research at a different school, REUs, etc.), or have junior/senior standing. Approval of research faculty required. Repeatable (3).

BIOL 493 Seminar 1(1-0)
As Needed.
Seminar for majors and minors concerning unique, current, or unusual topics in biology. Speakers may include guests, faculty, or students.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Completion of Biology core.

BIOL 494 Field Experience (1-4 V)
As Needed.
Volunteer work experience under program director, program coordinator and faculty supervisor.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

BIOL 495 Independent Study (1-4 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing. Permission of instructor. Repeatable (99).

BIOL 498 Internship (5-15 V)
As Needed.
Work experience in the Biology discipline under the combined supervision of the selected organization and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

BIOL 501 Microbiology 3(3-0)
Fall, Spring.
Introduction to the bacteria and viruses, including microbial genetics and physiology.
Prerequisites: BIOL 182 and BIOL 182L and CHEM 301 and CHEM 301L.
Corequisites: BIOL 501L.
Registration Information: None.

BIOL 501L Microbiology Laboratory 1(0-3)
Fall, Spring.
General Microbiology Laboratory. Prerequisites: BIOL 182 and BIOL 182L and CHEM 301 CHEM 301L.
Corequisites: BIOL 501.
Registration Information: None.

BIOL 502 Immunology 3(3-0)
Spring.
Cellular and molecular interactions and principles of innate and adaptive immunity including immune disorders, hypersensitivity, autoimmunity, infections, and cancer.
Prerequisite: BIOL 206 or BIOL 301 or BIOL 302 or BIOL 401 or BIOL 501.
Corequisite: None.
Registration Information: Recommend BIOL 351 as prerequisite.

BIOL 503 Virology 3(3-0)
Fall, Even.
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 BIOL 351.
Corequisite: None.
Registration Information: None.

BIOL 503L Virology Lab 1(0-2)
Fall.
Virology Lab.
Prerequisite: BIOL 301 and BIOL 301L and BIOL 351 and BIOL 503.
Corequisite: None.
Registration Information: Permission of instructor.

BIOL 505 Foundations in Graduate Studies 3(3-0)
As Needed.
Effective sourcing, use, and interpretation of the literature. Scientific methodology, writing, and review of research ethics. Development of a science plan.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MS program.

BIOL 510 (CBC 510) Foundations in Graduate Studies 3(3-0)
Fall.
Effective sourcing, use, and interpretation of the literature. Scientific methodology, writing, and review of research ethics. Development of a science plan.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MS program.

BIOL 512 Advanced Cellular Biology 3(3-0)
Spring.
Advanced investigations of the structural and functional organization of the cell, life cycles of cells, intracellular digestion, protein synthesis and cell death.
Prerequisite: BIOL 301 and BIOL 301L and BIOL 351.
Corequisite: BIOL 512L.
Registration Information: CHEM 302 and CHEM 302L strongly recommended as a prerequisite.

BIOL 512L Advanced Cellular Biology Lab 1(0-3)
Spring.
Advanced Cellular Biology Lab.
Prerequisite: None.
Corequisite: BIOL 512.
Registration Information: None.

BIOL 513 Plant Physiology 2(2-0)
As Needed.
Thorough examination of general physiology and function of plant body systems.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend BIOL 201 and BIOL 201L and CHEM 301 and CHEM 301L as prerequisites. Recommend co-enrollment in BIOL 513L.

BIOL 513L Plant Physiology Lab 2(0-4)
As Needed.
Plant Physiology Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend BIOL 201 and BIOL 201L and CHEM 301 and CHEM 301L as prerequisites. Recommend co-enrollment in BIOL 513L.

BIOL 514 Vertebrate Physiology 3(3-0)
Fall.
General physiology and the functions of animal and human body systems.
Prerequisite: BIOL 202 and BIOL 202L.
Corequisite: None.
Registration Information: Strongly recommend CHEM 301 and CHEM 301L and MATH 159 as prerequisites. Recommend co-enrollment in BIOL 514L.

BIOL 514L Vertebrate Physiology Lab 1(0-1)
Fall.
Vertebrate Physiology Lab.
Prerequisite: BIOL 202 and BIOL 202L.
Corequisite: None.
Registration Information: CHEM 301 and CHEM 301L and MATH 156 are strongly recommended as prerequisites. Recommended co-enrollment in BIOL 514.

BIOL 515 Medical Physiology 3(3-0)
Fall.
Medical physiology focusing on human body systems and their regulation, disorders, diagnosis, and treatments. Includes circulatory, respiratory, endocrine, nervous, muscular, digestive, reproductive, and urinary.
Prerequisites: BIOL 202 and BIOL 202L and CHEM 301 and CHEM 301L.
Corequisites: None.
Registration Information: Graduate level standing.

BIOL 521 Histology 2(2-0)
Spring, Odd.
A microscopic study of vertebrate tissues and organs.
Prerequisite: None.
Corequisite: BIOL 521L.
Registration Information: None.

BIOL 521L Histology Lab 2(0-4)
Spring, Odd.
Histology Lab.
Prerequisite: None.
Corequisite: BIOL 521.
Registration Information: None.

BIOL 522 Neurobiology 3(3-0)
Spring, Even.
Fundamentals of neuroscience, cellular and molecular signaling in the nervous system, electrophysiological properties of neurons, sensory and motor systems, and cellular mechanisms of cognition.
Prerequisite: BIOL 351.
Corequisite: None.
Registration Information: None.

BIOL 532 Developmental Biology 2(2-0)
As Needed.
Theory and principles of the development of representative vertebrate and invertebrate animals, with particular emphasis on the frog, chick, and Drosophila.
Prerequisite: BIOL 351.
Corequisite: BIOL 532L.
Registration Information: None.

BIOL 532L Developmental Biology Lab 2(0-4)
As Needed.
Developmental Biology Lab.
Prerequisite: None.
Corequisite: BIOL 532.
Registration Information: None.

BIOL 540 Advanced Biotechniques 2(2-0)
Fall, Odd.
Advanced lab covering cellular/molecular techniques and instrumentation. May include Flow cytometry, advanced microscopy, molecular cloning, CRISPR, Western blots, quantitative PCR, and next generation sequencing.
Prerequisite: BIOL 301 and BIOL 301L and BIOL 351.
Corequisite: BIOL 540L.
Registration Information: None.

BIOL 540L Advanced Biotechniques Lab 2(0-2)
Fall, Odd.
Advanced laboratory-based class covering important cellular/molecular techniques and instruments. Topics include Flow cytometry, Advanced Microscopy, Molecular Cloning, CRISPR, Western Blots, and Quantitative PC.
+ Prerequisite: BIOL 301 and BIOL 301L and BIOL 351.
Corequisite: BIOL 540.
Registration Information: None.

BIOL 541 Freshwater Invertebrate Zoology 2(2-0)
Spring, Odd.
Classification, phylogeny, systematics, morphology, physiology, and natural history of freshwater invertebrates inclusive of insects.
Prerequisite: None.
Corequisite: BIOL 541L.
Registration Information: Recommend BIOL 202 and BIOL 202L as prerequisites.

BIOL 541L Freshwater Invertebrate Zoology Lab 2(0-4)
Spring, Odd.
Freshwater Invertebrate Zoology Lab.
Prerequisite: None.
Corequisite: BIOL 541.
Registration Information: Recommend BIOL 202 and BIOL 202L as prerequisites.

BIOL 543 Limnology 2(2-0)
Spring, Even.
Biology, chemistry, and physics of lakes and rivers.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BIOL 543L Limnology Lab 2(0-4)
Spring, Even.
Limnology Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BIOL 548 Biological Statistics 3(3-0)
As Needed.
Basic statistical methods necessary to understand, evaluate, analyze and interpret scientific literature and experimental results.
Prerequisite: MATH 156.
Corequisite: None.
Registration Information: None.

BIOL 552 Advanced Microscopy 2(2-0)
As Needed.
Theory and application of microscopy to the biological sciences. Includes preparation of cells and tissues for examination, scope operation, and image analysis.
Prerequisite: None.
Corequisite: BIOL 552L.
Registration Information: None.

BIOL 552L Advanced Microscopy Lab 2(0-4)
As Needed.
Advanced Microscopy Lab.
Prerequisite: None.
Corequisite: BIOL 552.
Registration Information: None.

BIOL 553 Ecology 2(2-0)
Fall, Even.
Interrelationships among organisms and their environment, employing quantitative methods and conceptual models.
Prerequisite: None.
Corequisite: BIOL 553L.
Registration Information: Recommend BIOL 352 as prerequisite.

BIOL 553L Ecology Field Studies 2(0-4)
Fall, Even.
Ecology Field Studies.
Prerequisite: None.
Corequisite: BIOL 553.
Registration Information: None.

BIOL 554 Behavioral Ecology 3(3-0)
Fall, Odd.
Evolution and adaptive significance of animal behaviors with a focus on current research.
Prerequisite: None.
Corequisite: None.
Registration Information: BIOL 202 recommended as prerequisite.

BIOL 559 Comprehensive Exam 1(1-0)
As Needed.
Preparation and administration of comprehensive exam for degree completion.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of director.

BIOL 560 Survey of Genomics & Bioinformatics 3(3-0)
As Needed.
Theory and practice of genome analysis including use of statistics, databases and biomolecular sequence analysis software.
Prerequisite: BIOL 351.
Corequisite: None.
Registration Information: None.

BIOL 561 Applied Geospatial Technology (GIS/GPS) 3(2-2)
Fall, Odd.
Theory and practice of using Geographic Information Systems (GIS) and Global Positioning Systems (GPS) for geographic data analysis, and to georeference data.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BIOL 562 Environmental Policy & Management 3(3-0)
Spring, Odd.
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.
Corequisite: None.
Registration Information: None.

BIOL 565 Environmental Toxicology 3(3-0)
Fall, Even.
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 and BIOL 181L and BIOL 182 and BIOL 182L.
Corequisite: None.
Registration Information: CHEM 302 and 302L is strongly strongly recommended as prerequisite.

BIOL 568 Evolution 3(3-0)
As Needed.
Overview of the basic concepts in evolutionary biology with focus on patterns and processes through the use of molecular and organismal examples.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BIOL 577 Current Issues in Biology (1 V)
As Needed.
Discussion of presentations by student and faculty speakers, primary literature, and TED Talks related to a number of biological research areas.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (3).

BIOL 578 Practicum in Laboratory Instruction 1(0-2)
Fall, Spring.
Laboratory preparation, instruction, and methods under the guidance and supervision of a professor.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of program director and chair. Repeatable (4).

BIOL 579 Ichthyology 2(2-0)
Fall, Odd.
The morphology, taxonomy and ecology of fishes; an introduction to fishery biology and aquaculture.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 579L.

BIOL 579L Ichthyology Laboratory 1(0-2)
Fall, Odd.
Ichthyology Laboratory.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 479.

BIOL 581 Entomology 2(2-0)
Fall, Odd.
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 and BIOL 202L.
Corequisite: BIOL 581L.
Registration Information: None.

BIOL 581L Entomology Lab 1(0-2)
Fall, Odd.
Entomology Lab.
Prerequisite: None.
Corequisite: BIOL 581.
Registration Information: None.

BIOL 582 Herpetology 2(2-0)
Fall, Even.
Diversity, anatomy, physiology, evolution, and ecology of reptiles of amphibians. Emphasis will be placed on novel evolutionary adaptations within the major taxa.
Prerequisite: None.
Corequisite: BIOL 582L.
Registration Information: None.

BIOL 582L Herpetology Lab 1(0-2)
Fall, Even.
Herpetology Lab.
Prerequisite: None.
Corequisite: BIOL 582.
Registration Information: None.

BIOL 583 Mammalogy 2(2-0)
Spring, Even.
Evolution, classification and biology of mammals; practice in identifying and preparing specimens.
Prerequisite: None.
Corequisite: BIOL 583L.
Registration Information: None.

BIOL 583L Mammalogy Lab 1(0-2)
Spring, Even.
Mammalogy Lab.
Prerequisite: None.
Corequisite: BIOL 583.
Registration Information: None.

BIOL 584 Ornithology 2(2-0)
Spring, Odd.
Classification, life history, laboratory and field identification of birds.
Prerequisite: None.
Corequisite: BIOL 584L.
Registration Information: None.

BIOL 584L Ornithology Lab 1(0-2)
Spring, Odd.
Ornithology Lab.
Prerequisite: None.
Corequisite: BIOL 584.
Registration Information: None.

BIOL 585 Plant Taxonomy 2(2-0)
As Needed.
Identification of common vascular plant families of Colorado with an emphasis on the flowering plants; study of their systematic relationships.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 585L.

BIOL 585L Plant Taxonomy Lab 2(0-4)
As Needed.
Plant Taxonomy Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommend co-enrollment in BIOL 585.

BIOL 586 Field Botany 3(3-0)
As Needed.
Principles and applications of field techniques used in vegetation assessment, surveys, and vegetation monitoring.
Prerequisite: None.
Corequisite: None.
Registration Information: Recommended prerequisite of BIOL 201 and 201L.

BIOL 588 Internship Seminar 1(1-0)
As Needed.
Graduate internship presentation and examination for completion of MS degree option within the Graduate Programs in Natural Sciences.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

BIOL 589 Thesis Defense 1(1-0)
As Needed.
Thesis presentation for completion of MS degree option within the Graduate Programs in Natural Sciences.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

BIOL 591 Special Topics (1-4 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

BIOL 592 Research (1-6 V)
As Needed.
Faculty directed research project for graduate students.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Approval of department chair or program director. Repeatable (99).

BIOL 593 (CBC 593, CHEM 593) Seminar 1(1-0)
As Needed.
An interdisciplinary seminar on topics appropriate to the application of natural sciences.
Prerequisite: BIOL 510 or CBC 510 or CHEM 510.
Corequisite: None.
Registration Information: Admission to MS program.

BIOL 595 Independent Study (1-4 V)
As Needed.
Independent Study
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor and department chair.

BIOL 598 Internship (1-4 V)
As Needed.
Volunteer or paid work experience under the combined supervision of the selected organization and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

BIOL 599 Thesis Research (1-6 V)
As Needed.
Continued enrollment is dependent upon satisfactory progress in thesis work.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Approval of department chair. Repeatable (6).

Business Administration (BSAD)

BSAD 101 Business-Careers and Opportunities 1(1-0)
Fall, Spring.
Introduction to the world of business that will provide insights on careers, business disciplines, and the world of business.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BSAD 102 Introduction to Personal Finance 3(1-0)
As Needed.
This introductory course serves as a vehicle to deliver fundamental personal financial management skills to students, providing the tools necessary to make good financial decisions.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BSAD 211 Introduction to Study Abroad 1(1-0)
As Needed.
Course designed to inform students about the study abroad process in order to maximize their international learning experience.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

BSAD 250 Business Law 3(3-0)
As Needed.
Explores the legal environment of business. Topics include contracts, torts, agency, ethical and criminal implications of business actions, and property laws.
Prerequisite: BSAD 101 and ENG 101 and 102.
Corequisite: None.
Registration Information: None.

BSAD 265 Inferential Statistics & Problem Solving 3(3-0)
Fall, Spring, Summer.
Statistical methods in business, sampling, parameter estimation, hypothesis testing, correlation, multiple regression, and chi square tests. Use of problem solving methods.
Prerequisite: MATH 101.
Corequisite: None.
Registration Information: None.

BSAD 270 Business Communications 3(3-0)
Fall, Spring, Summer.
Means of extending management capabilities through effective internal and external communications, including data organization and presentation.
Prerequisite: ENG 101 and ENG 102.
Corequisite: None.
Registration Information: None.

BSAD 302 Ethics in Business 3(3-0)
Fall, Spring.
Examination of issues addressing ethical, legal, social and environmental responsibilities of businesses toward government, customers, employees, and the general public.
Prerequisite: BSAD 270.
Corequisite: None.
Registration Information: None.

BSAD 360 Advanced Business Statistics 3(3-0)
Fall, Spring.
Development of advanced statistical techniques to support business decision-making. Topics include advanced multiple regression analysis, analysis of variance and nonparametric techniques.
Prerequisite: BSAD 265.
Corequisite: None.
Registration Information: None.

BSAD 475 International Business 3(3-0)
Fall, Spring.
Opportunities and problems of multinational firms including environmental factors and formulation of strategies and policies for all functional areas of business.
Prerequisite: FIN 330 and MGMT 301 and MKTG 340.
Corequisite: None.
Registration Information: None.

BSAD 480 Business Consulting 3(3-0)
As Needed.
Integrating prior studies in business into a realistic approach to assist in solving problems faced by selected firms and organizations in the community.
Prerequisite: BSAD 360 and FIN 330 and MGMT 301 and MGMT 311 and MKTG 340.
Corequisite: None.
Registration Information: None.

BSAD 490 Special Projects (1-6 V)
As Needed.
Special Projects.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

BSAD 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

BSAD 493 Senior Seminar 1(1-0)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Senior standing.

BSAD 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Permission of department chair. Repeatable (6).

BSAD 498 Internship (1-6 V)
As Needed.
Supervised field work in selected business, social and governmental organizations; supplemented by written reports.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. HSB majors only. Permission of internship coordinator. Repeatable (6).

BSAD 501 Fundamentals of Statistics 3(3-0)
As Needed.
This class prepares students to solve business problems using statistics and business research methods using statistical estimation, hypothesis testing, and advanced statistical methods.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 502 Business Ethics and Environment 3(3-0)
As Needed.
The impact of continued social, political, economic, technological, and legal pressures upon ethical business issues and managerial decision making.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 505 Inferential Statistics and Problem Solving 3(3-0)
As Needed.
Statistical methods in business, sampling, parameter estimation, hypothesis testing, correlation, multiple regression and chi square tests. Use of problem solving methods.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 510 Academic Writing for MBA Students 1(1-0)
Fall.
This course is designed to help prepare students for the rigors of academic writing at the graduate and professional levels.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 545 Advanced Quantitative Analysis for Business 3(3-0)
As Needed.
This class prepares students to solve business problems using advanced quantitative methods and business modeling techniques.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 560 Managerial Analytics 3(3-0)
As Needed.
This class will explore the principles, methods, tools and best practices in contemporary applied business analytics.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 575 International Business 3(3-0)
Fall, Spring.
The objective of this course is to familiarize students with the dynamics and complexity of managing business across the globe.
Prerequisite: MGMT 201.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 580 Business Research Methodology 3(3-0)
As Needed.
Fundamentals of qualitative and quantitative research design including development of hypothesis and assessment techniques in preparation for undertaking research projects.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 591 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director. Repeatable (6).

BSAD 592 Research (1-6 V)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

BSAD 595 Independent Study (1-3 V)
As Needed.
Individual study of a subject determined by the instructor and student with permission of the director.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director. Repeatable (6).

Cannabis Biology & Chemistry (CBC)

CBC 291 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 292 Research (1-3 V)
Fall, Spring, Summer.
Faculty directed research project for undergraduate first or second-year student.
Prerequisite: None.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor. May be repeated for a maximum of 3.0.

CBC 401 Medicinal Plant Biochemistry 3(3-0)
Spring, Even.
A focus on plants exhibiting important biological functions of therapeutic importance. The course emphasizes the biochemical pathways that produce bioactive molecules.
Prerequisite: CHEM 301.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. BIOL 201 recommended.

CBC 413 Cannabis Physiology & Growth (3 V)
Fall, Odd.
This course is designed to learn fundamental Cannabis biology, biochemistry, and physiology with more advanced concepts relevant to medicinal uses of cannabinoids in human disorders.
Prerequisite: BIOL 201.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

CBC 413L Cannabis Physiology & Growth Lab 1(0-3)
Fall, Odd.
This laboratory course is designed to learn fundamental Cannabis biology, biochemistry, and physiology with more advanced concepts relevant to medicinal uses of cannabinoids in human disorders.
Prerequisite: BIOL 201 and BIOL 201L and BIOL 350, and BIOL 351.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. CBC 413 is strongly recommended as corequisite.

CBC 422 Natural Products Extraction & Analysis (3 V)
Fall, Even.
Theory of bench top and instrumental techniques for the extraction and chemical analysis of natural products from various sources with an emphasis on applications related to cannabis.
Prerequisite: CHEM 419.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 422L Natural Products Extraction & Analysis Lab 1(0-3)
Fall, Even.
Practical applications of bench top and instrumental techniques for the extraction and chemical analysis of natural products from various sources with an emphasis on applications related to cannabis.
Prerequisite: CHEM 419L.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. CBC 422 is strongly recommended as corequisite.

CBC 463 Medicinal Chemistry & Pharmacology (3 V)
Fall, Odd.
The chemical and biological processes related to understanding drug action. Provides an overview of these processes and the art and logic of organic medicinal chemistry properties.
Prerequisite: CBC 401.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 491 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 492 Research (1-3 V)
Fall, Spring, Summer.
Faculty directed research project for undergraduate student.
Prerequisite: None.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 493 Seminar (1 V)
Fall.
Presentation of a formal presentation on research or a current topic in the literature using software-based delivery methods.
Prerequisite: None.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 495 Independent Study (1-7 V)
Fall, Spring, Summer.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 498 Internship (1-6 V)
Fall, Spring, Summer.
Work experience in the discipline under the combined supervision of the selected organization and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 501 Medicinal Plant Biochemistry 3(3-0)
Spring, Even.
Natural products have always contributed extensively towards the development of modern medicine. This course will focus on the plants and their biochemical pathways that produce bioactive molecules.
Prerequisite: CHEM 301.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. BIOL 201 recommended.

CBC 510 (BIOL 510) Foundations in Graduate Studies 3(3-0)
Fall.
Effective sourcing, use, and interpretation of the literature. Scientific methodology, writing, and review of research ethics. Development of a science plan.
Prerequisite: None.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Admission to MS program.

CBC 513 Cannabis Physiology & Growth 3(3-0)
Fall, Odd.
This course is designed to learn fundamental Cannabis biology, biochemistry, physiology, with more advanced concepts relevant to medicinal uses of cannabinoids in human disorders.
Prerequisite: BIOL 201.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

CBC 513L Cannabis Physiology & Growth Lab 1(0-2)
Fall, Odd.
This course is designed to learn fundamental Cannabis biology, biochemistry, physiology, with more advanced concepts relevant to medicinal uses of cannabinoids in human disorders in a laboratory setting.
Prerequisite: BIOL 201 and BIOL 201L.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

CBC 522 Natural Products Extraction & Analysis 3(3-0)
Fall, Even.
This course focuses bench top and instrumental techniques for the extraction and chemical analysis of natural products from various sources.
Prerequisite: CHEM 419.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Permission of instructor.

CBC 522L Natural Products Extraction & Analysis Lab 1(0-2)
Fall, Even.
During this course employ laboratory techniques to extract, cleanup, and qualitatively/quantitatively analyze natural products with an emphasis on cannabis.
Prerequisite: CHEM 419L.
Corequisite: CBC 522.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

CBC 563 Medicinal Chemistry & Pharmacology 3(3-0)
Fall, Odd.
Students are introduced to basic concepts related to the specific disciplines in the pharmaceutical sciences, including pharmacology, pharmaceutics, pharmacokinetics, pharmacogenomics, and medicinal chemistry.
Prerequisite: BIOL 351 or CHEM 411.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

CBC 593 (BIOL 593, CHEM 593) Seminar 1(1-0)
As Needed.
An interdisciplinary seminar on topics appropriate to the application of natural sciences.
Prerequisite: BIOL 510 or CBC 510 or CHEM 510.
Corequisite: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies. Admission to MS program.

Center for Teaching and Learning (CTL)

CTL 191 Special Topics (1-3 V)
As Needed.
Topics course covering a range of interdisciplinary issues.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CTL 291 Special Topics (1-3 V)
As Needed.
Topics course covering a range of interdisciplinary issues.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CTL 391 Special Topics (1-3 V)
As Needed.
Topics course covering a range of interdisciplinary issues.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CTL 491 Special Topics (1-3 V)
As Needed.
Topics course covering a range of interdisciplinary issues.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CTL 493 Seminar (1-3 V)
As Needed.
In depth analysis of specific topics, themes, or issues.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CTL 494 Field Experience (1-3 V)
As Needed.
Field Experience in educational of professional setting.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CTL 495 Independent Study (1-3 V)
As Needed.
Independent study of issue or theme related to educational or professional topic.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CTL 591 Special Topics (1-3 V)
As Needed.
Topics course covering a range of interdisciplinary issues.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CTL 593 Seminar (1-3 V)
As Needed.
In depth analysis of specific topics, themes, or issues.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CTL 594 Field Experience (1-3 V)
As Needed.
Field Experience in educational of professional setting.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CTL 595 Independent Study (1-3 V)
As Needed.
Independent study of issue or theme related to educational or professional topic.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

Chemistry (CHEM)

A grade of C or better is required for prerequisite courses.

CHEM 101 Chemistry and Society (GT-SC2) 3(3-0)
Spring.
Chemistry related to the everyday world. Drugs, food, pollution, pesticides, consumer products, energy, and home health. Principally for non-science majors.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: ST, GT-SC2)

CHEM 101L Chemistry and Society Lab (GT-SC1) 1(0-2)
Spring.
Laboratory is optional. Experiments to exemplify the logical steps of problem solving and explore the physical and chemical world.
Prerequisite: None.
Corequisite: None.
Registration Information: CHEM 101 strongly recommended. as corequisite.
(Gen Ed: ST, GT-SC1)

CHEM 111 Principles of Chemistry (GT-SC2) 3(3-0)
Fall, Spring.
Fundamental laws, theories and principles of chemical reactions. Credit not applicable for chemistry majors or minors.
Prerequisite: MATH 101.
Corequisite: None.
Registration Information: Equivalent math placement score.
(Gen Ed: ST, GT-SC2)

CHEM 111L Principles of Chemistry Lab (GT-SC1) 1(0-2)
Fall, Spring.
Experiments using common chemical equipment and techniques to aid the student in learning what occurs in the chemical laboratory.
Prerequisite: CHEM 111.
Corequisite: None.
Registration Information: None.
(Gen Ed: ST, GT-SC1)

CHEM 121 General Chemistry I (GT-SC2) 4(4-0)
Fall, Spring.
For science, engineering and pre-professional curricula. Atomic theory, chemical bonding, periodic properties, states of matter, reactions, oxidation-reduction, stoichiometry, thermochemistry, inorganic nomenclature.
Prerequisite: CHEM 111 and MATH 120.
Corequisite: None.
Registration Information: One year of high school chemistry strongly recommended. Satisfactory placement score on California Chemistry Diagnostic test may be accepted in place of CHEM 111. Equivalent Accuplacer score may be accepted in place of MATH 120.
(Gen Ed: ST, GT-SC2)

CHEM 121L General Chemistry Lab I (GT-SC1) 1(0-2)
Fall, Spring.
General Chemistry Lab I.
Prerequisite: None.
Corequisite: None.
Registration Information: CHEM 121 is strongly recommended as corequisite.
(Gen Ed: ST, GT-SC1)

CHEM 122 General Chemistry II (GT-SC2) 4(4-0)
Fall, Spring.
Continuation of CHEM 121. Thermodynamics, kinetics, equilibria, nuclear chemistry, electrochemistry, acids and bases, solutions, descriptive inorganic chemistry.
Prerequisite: CHEM 121.
Corequisite: None.
Registration Information: None.
(Gen Ed: ST, GT-SC2)

CHEM 122L General Chemistry Lab II (GT-SC1) 1(0-2)
Fall, Spring.
Laboratory component to CHEM 122.
Prerequisite: CHEM 121L.
Corequisite: None.
Registration Information: CHEM 122 is strongly recommended as corequisite.
(Gen Ed: ST, GT-SC1)

CHEM 125 Environmental Science (GT-SC2) 3(3-0)
Fall.
An overview of terrestrial and aquatic environments, the atmosphere, energy, climate change, and natural resources. Emphasis is placed on sustainability needs and challenges.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: ST, GT-SC2)

CHEM 125L Environmental Science Laboratory (GT-SC1) 1(0-2)
Fall.
Laboratory course to accompany CHEM 125.
Prerequisite: None.
Corequisite: None.
Registration Information: CHEM 125 is strongly recommended as corequisite.
(Gen Ed: ST, GT-SC1)

CHEM 150 (PHYS 150) Elementary Concepts in Phys & Chem 4(3-2)
Spring.
Hands-on standards-based approach to understanding basic concepts of physics and chemistry. Integrated lecture, lab and discussion periods.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance into Teacher Education Program.

CHEM 160 Introduction to Forensic Science (GT-SC2) 3(3-0)
Spring.
Overview of Forensic Science. Crime scene investigation. Evidence collection. Microscopy techniques. Arson analysis. Fingerprints. Serology and DNA use.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: ST, GT-SC2)

CHEM 160L Intro to Forensic Science Lab (GT-SC1) 1(0-2)
Spring.
Overview of Forensic Science Laboratory. Evidence handling and collection. Microscopy techniques. Arson analysis, Fingerprints. DNA fingerprinting.
Prerequisite: None.
Corequisite: None.
Registration Information: CHEM 160 strongly recommended as corequisite.
(Gen Ed: ST, GT-SC1)

CHEM 170 Academic Orientation 0.5(0.5-0)
Fall.
Chemistry majors entering the program are introduced to principles of academic communication and professionalism relevant to freshman year. Chemistry careers, study skills, and academic advisement are also included.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CHEM 211 Introduction to Organic Chemistry 3(3-0)
Fall.
Survey of organic chemistry chemical structure, reactivity and functional groups are presented in context of relevance to society.
Prerequisite: CHEM 111.
Corequisite: None.
Registration Information: None.

CHEM 211L Intro to Organic Chemistry Lab 1(0-3)
Fall.
Survey of organic chemistry laboratory course. Basic organic laboratory techniques and skills, both micro and macro scale are presented.
Prerequisite: None.
Corequisite: None.
Registration Information: CHEM 211 strongly recommended as corequisite.

CHEM 260 Forensic Chemistry I 3(3-0)
As Needed.
Investigation of comparative/visual forensic analysis techniques. Topics include fingerprinting, bloodstain pattern analysis, fiber comparisons, and firearms analysis.
Prerequisite: CHEM 111 or CHEM 121 and CHEM 160.
Corequisite: None.
Registration Information: None.

CHEM 260L Forensic Chemistry I Laboratory 1(0-3)
As Needed.
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 CHEM 121 and CHEM 160 and CHEM 160L.
Corequisite: None.
Registration Information: CHEM 260 is strongly recommended as corequisite.

CHEM 291 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CHEM 292 Research 1-3(1-3-1-3)
Fall, Spring, Summer.
Faculty directed research project for undergraduate first or second-year student.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (3).

CHEM 301 Organic Chemistry I 3(3-0)
Fall, Spring.
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: None.
Registration Information: None.

CHEM 301L Organic Chemistry Lab I 2(0-6)
Fall, Spring.
Organic Chemistry Lab I.
Prerequisite: CHEM 122L.
Corequisite: None.
Registration Information: CHEM 301 strongly recommended as corequisite.

CHEM 302 Organic Chemistry II 3(3-0)
Fall, Spring.
Continuation of CHEM 301.
Prerequisite: CHEM 301.
Corequisite: None.
Registration Information: None.

CHEM 302L Organic Chemistry Lab II 2(0-6)
Fall, Spring.
Organic Chemistry Lab II.
Prerequisite: CHEM 301L.
Corequisite: None.
Registration Information: CHEM 302 strongly recommended as corequisite.

CHEM 311 Biochemistry Survey 3(3-0)
Fall.
Survey of biochemistry. For pre-health professional students. Intermediary metabolism is taught at an intermediate level and in the context of human nutrition and clinical applications.
Prerequisite: CHEM 301.
Corequisite: None.
Registration Information: CHEM 302 strongly recommended as prerequisite.

CHEM 317 Quantitative Analysis 3(3-0)
Fall.
Volumetric and gravimetric analysis integrated with instrumental analysis, both optical and electrometric methods.
Prerequisite: CHEM 122.
Corequisite: None.
Registration Information: None.

CHEM 317L Quantitative Analysis Lab 2(0-6)
Fall.
Quantitative Analysis Lab.
Prerequisite: CHEM 317.
Corequisite: None.
Registration Information: CHEM 317 strongly recommended as corequisite.

CHEM 321 Physical Chemistry I 3(3-0)
Spring.
Chemical thermodynamics, chemical dynamics (kinetics), chemical structure and statistical mechanics.
Prerequisite: CHEM 322.
Corequisite: None.
Registration Information: None.

CHEM 322 Physical Chemistry II 3(3-0)
Fall.
Quantum mechanics, spectroscopy, chemical structure, and statistical mechanics.
Prerequisite: CHEM 122 and MATH 126.
Corequisite: None.
Registration Information: MATH 224 and PHYS 201 or PHYS 221 strongly recommended as corequisite.

CHEM 323 Experimental Physical Chemistry 2(0-4)
Spring.
Laboratory techniques in thermodynamics, chemical equilibria, phase phenomena, kinetics, and spectroscopy.
Prerequisite: CHEM 322.
Corequisite: None.
Registration Information: CHEM 321 is strongly recommended as prerequisite. Permission of instructor.

CHEM 370 Academic Enrichment 0.5(0.5-0)
Spring.
Chemistry majors in the third year of the program and above review principles of academic communication, professionalism, as well as academic progress and skills in relation to industrial/academic career preparation.
Prerequisite: CHEM 170.
Corequisite: None.
Registration Information: Permission of department chair.

CHEM 378 Practicum in Laboratory Instruction 1(0-2)
Fall, Spring.
Laboratory preparation, instruction, safety, and methods under the guidance of an instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (2).

CHEM 389 Scientific Literature Review 1(1-0)
As Needed.
Surveys of both print and web-based chemical and biochemical literature.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: Repeatable (2).

CHEM 401 Advanced Organic Chemistry 3(3-0)
Fall, Even.
Topics of advanced organic chemistry, including organic reactions, mechanisms, natural products, and spectroscopy.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 401L Advanced Organic Chemistry Lab 2(0-4)
Fall, Even.
Laboratory course to accompany CHEM 401. Molecular structure determination by chemical and instrumental methods.
Prerequisite: CHEM 302 and CHEM 302L.
Corequisite: CHEM 401.
Registration Information: Permission of instructor.

CHEM 402 Spectroscopy 3(3-0)
Spring, Even.
An advanced study of topics of spectroscopy focusing on the structure determination of compounds. Emphasis on IR, NMR, MS, and UV-VIS spectroscopies.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: None.

CHEM 403 Polymer Chemistry 3(3-0)
As Needed.
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 and CHEM 302L.
Corequisite: None.
Registration Information: None.

CHEM 411 Biochemistry I 3(3-0)
Fall.
Chemistry of constituents of living matter, including proteins, carbohydrates, nucleic acids and lipids. An introduction to enzymes and coenzymes.
Prerequisite: CHEM 302.
Corequisite: None.
Requisite Information: Permission of instructor.

CHEM 412 Biochemistry II 3(3-0)
Spring.
Continuation of CHEM 411. Intermediary metabolism of carbohydrates, lipids, and amino acids. Bioenergetics.
Prerequisite: CHEM 411 or CHEM 511.
Corequisite: None.
Requisite Information: Permission of instructor.

CHEM 412L Biochemistry II Lab 2(0-6)
As Needed.
Biochemistry II Lab.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: CHEM 412 strongly recommended as corequisite.

CHEM 413 Molecular Basis of Disease 3(3-0)
As Needed.
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 CHEM 511.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 419 Instrumental Analysis 3(3-0)
Spring.
Instrumental techniques in chemical separations, electrochemistry, atomic, and molecular spectroscopy.
Prerequisite: CHEM 317 and CHEM 322.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 419L Instrumental Analysis Lab 2(0-6)
Spring.
Instrumental Analysis Lab.
Prerequisite: CHEM 317 and CHEM 322.
Corequisite: None.
Registration Information: CHEM 419 strongly recommended as corequisite. Permission of instructor.

CHEM 420 Inorganic Chemistry (3 V)
Fall.
A foundations in inorganic chemistry survey course, which includes atomic and molecular structure, symmetry, simple solids, acid-base theory, oxidation-reduction reactions, coordination chemistry, and physical methods.
Prerequisite: CHEM 122.
Corequisite: CHEM 420L.
Registration Information: None.

CHEM 420L Inorganic Chemistry Lab 1(0-3)
Fall.
Inorganic laboratory techniques, inorganic qualitative analysis, synthesis and characterization.
Prerequisite: None.
Corequisite: CHEM 420.
Registration Information: None.

CHEM 421 Advanced Inorganic Chemistry (3 V)
Spring.
Detailed examination of inorganic chemistry with emphasis on symmetry and group theory, chemical bonding and structure, electronic spectroscopy, and reactivity.
Prerequisite: CHEM 322 and CHEM 420.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 425 Environmental Chemistry 3(3-0)
As Needed.
Chemical process in air, water and soil. Air, water analysis and treatment, pollution.
Prerequisite: CHEM 321.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 425L Environmental Chemistry Lab 2(0-4)
As Needed.
Laboratory course to accompany CHEM 425. Explores sampling and laboratory techniques utilized in the analysis of environmental samples or to address environmental issues.
Prerequisite: None.
Corequisite: None.
Registration Information: CHEM 425 strongly recommended as corequisite.

CHEM 431 Advanced Physical Chemistry 3(3-0)
Fall, Odd.
Emphasizes latest developments in applied physical chemistry, including advanced theory, and instrumental and computational applications.
Prerequisite: CHEM 321 and CHEM 322.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 460 Forensic Chemistry II 2(2-0)
As Needed.
Investigation of identification techniques for forensic analysis. Topics include arson, biological fluid and drug identification, and DNA analysis.
Prerequisite: CHEM 260 and CHEM 260L and CHEM 302 and CHEM 302L .
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 460L Forensic Chemistry II Lab 2(0-4)
As Needed.
The laboratory will accompany CHEM 460, Forensic Chemistry II lecture.
Prerequisite: CHEM 260 and CHEM 260L and CHEM 302 and CHEM 302L.
Corequisite: None.
Registration Information: CHEM 460 is strongly recommended as corequisite. Permission of instructor.

CHEM 491 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CHEM 492 Research (1-3 V)
Fall, Spring, Summer.
Faculty directed research project for undergraduate student.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (4).

CHEM 493 Seminar 1(1-0)
Fall.
Presentation of a formal presentation on chemical research or a current topic in the chemical literature using software-based delivery methods.
Prerequisite: CHEM 370.
Corequisite: None.
Registration Information: Repeatable (2).

CHEM 495 Independent Study (1-7 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CHEM 498 Internship (1-6 V)
Fall, Spring, Summer.
Work experience in the chemistry discipline under the combined supervision of the selected organization and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CHEM 501 Advanced Organic Chemistry 3(3-0)
Fall, Even.
Topics of advanced organic chemistry including organic reactions, mechanisms, natural products, spectroscopy, and industrial applications.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 501L Advanced Organic Chemistry Lab 2(0-4)
Fall, Even.
Molecular structure determination by chemical and instrumental methods. Advanced synthetic techniques.
Prerequisite: CHEM 302 and CHEM 302L.
Corequisite: CHEM 501.
Registration Information: Permission of instructor.

CHEM 502 Spectroscopy 3(3-0)
Spring, Even.
An advanced study of topics of spectroscopy focusing on the structure determination of compounds. Emphasis on IR, NMR, MS, and UV-VIS spectroscopies.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: None.

CHEM 503 Polymer Chemistry 3(3-0)
As Needed.
Study of synthetic polymers including synthesis, mechanisms of formation, structure elucidation, reactivity, properties, and industrial application. Biopolymers also will be considered.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 510 (CHEM 593) Foundations in Graduate Studies 3(3-0)
As Needed.
An interdisciplinary seminar on topics appropriate to the application of natural sciences.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

CHEM 511 Biochemistry I 3(3-0)
Fall.
Chemistry of constituents of living matter, including proteins, carbohydrates, nucleic acid and lipids. An introduction to enzymes and coenzymes.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 512 Biochemistry II 3(3-0)
Spring.
Intermediary metabolism of carbohydrates, lipids and amino acids. Bioenergetics.
Prerequisite: CHEM 411 or CHEM 511.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 512L Biochemistry II Lab 2(0-6)
As Needed.
Biochemistry II Lab.
Prerequisite: CHEM 302.
Corequisite: None.
Registration Information: CHEM 512 strongly recommended as corequisite.

CHEM 513 Molecular Basis of Disease 3(3-0)
As Needed.
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 CHEM 511.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 519 Instrumental Analysis 3(3-0)
Spring.
Instrumental techniques in chemical separations, electro-chemistry, atomic, and molecular spectroscopy.
Prerequisite: CHEM 317 and CHEM 322.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 519L Instrumental Analysis Lab 2(0-6)
Spring.
Instrumental Analysis Lab.
Prerequisite: CHEM 317 and CHEM 322.
Corequisite: None.
Registration Information: CHEM 519 strongly recommended as corequisite. Permission of instructor.

CHEM 521 Advanced Inorganic Chemistry 3(3-0)
Spring.
Structure and bonding, coordination theory, periodic relations, equilibrium, kinetics, thermodynamics, descriptive chemistry, industrial applications.
Prerequisite: CHEM 322 and CHEM 420.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 525 Environmental Chemistry 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 525L Environmental Chemistry Lab 2(0-4)
As Needed.
Laboratory course to accompany CHEM 525. Explores sampling and laboratory techniques utilized in the analysis of environmental samples or to address environmental issues.
Prerequisite: None.
Corequisite: None.
Registration Information: CHEM 525 strongly recommended as corequisite.

CHEM 529 Advanced Analytical Chemistry 3(3-0)
Spring, Even.
Emphasizes latest developments in applied analytical chemistry, including advanced theory, wet chemical methods, and the design and application of advanced instrumentation.
Prerequisite: CHEM 321 and CHEM 419 and CHEM 419L or CHEM 519 and CHEM 519L.
Corequisite: None.
Registration Information: None.

CHEM 531 Advanced Physical Chemistry 3(3-0)
Fall, Odd.
Emphasizes latest developments in applied physical chemistry, including advanced theory, and instrumental and computational applications.
Prerequisite: CHEM 321 and CHEM 322.
Corequisite: None.
Registration Information: Permission of instructor.

CHEM 550 Industrial Chemistry 2(2-0)
As Needed.
Econ importance & special characteristics of chem industry. Feedstocks, intermediates, & products. Case studies illistarting various topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CHEM 560 Forensic Chemistry II 2(2-0)
As Needed.
Investigation of identification techniques for forensic analysis. Topics include arson, biological fluid and drug identification, and DNA analysis.
Prerequisite: CHEM 260 and CHEM 260L and CHEM 302 and CHEM 302L.
Corequisite: CHEM 560L.
Registration Information: Permission of instructor.

CHEM 560L Forensic Chemistry II Laboratory 2(0-4)
As Needed.
The laboratory will accompany CHEM 560, Forensic Chemistry II lecture.
Prerequisite: CHEM 260 and CHEM 260L and CHEM 302 and CHEM 302L.
Corequisite: None.
Registration Information: CHEM 560 strongly recommended as corequisite. Permission of instructor.

CHEM 578 Practicum in Laboratory Instruction 1(0-2)
Fall, Spring.
Laboratory preparation, instruction and methods under the guidance and supervision of an instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.
Repeatable (4).

CHEM 580 Graduate Writing in the Sciences 1(1-0)
As Needed.
This one-credit course is designed to help prepare students for the rigors of academic writing at the graduate and professional levels.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CHEM 588 Internship Defense 1(1-0)
Fall, Spring, Summer.
Graduate internship presentation, satisfactory report, and examination for completion of MS degree option within the Graduate Programs in Natural Sciences.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

CHEM 589 Thesis Defense 1(1-0)
Fall, Spring, Summer.
Thesis presentation and satisfactory written thesis for completion of MS degree option within the Graduate Programs in Natural Sciences.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

CHEM 591 Special Topics (1-4 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CHEM 592 Research (1-6 V)
Fall, Spring, Summer.
Faculty directed research project for graduate students.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor. Repeatable (99).

CHEM 593 (BIOL 593, CBC 593) Seminar 1(1-0)
As Needed.
An interdisciplinary seminar on topics appropriate to the application of natural sciences.
Prerequisite: BIOL 510 or CBC 510 or CHEM 510.
Corequisite: None.
Registration Information: Admission to MS program.

CHEM 595 Independent Study (1-4 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CHEM 598 Internship (1-4 V)
Fall, Spring, Summer.
Volunteer or paid work experience under the combined supervision of the selected organization and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor. Repeatable (99).

CHEM 599 Thesis Research (1-6 V)
As Needed.
Thesis Research.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

Chicano Studies (CS)

A grade of C or better is required for prerequisite courses.

CS 101 Introduction to Chicano Studies (GT-HI1) 3(3-0)
Fall, Spring, Summer.
Overview of the historical, political and socio-cultural experience of the Chicano.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: HS, GT-HI1) (CC)

CS 136 (HIST 136) The Southwest United States (GT-HI1) 3(3-0)
Fall, Spring.
This course traces the culture and historical development of the southwestern United States, including cultural contributions of the American Indian and Hispanic peoples.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: HS, GT-HI1) (CC)

CS 215 Chicanos & Chicanas in Leadership 3(3-0)
As Needed.
Survey of outstanding leaders in the Chicano community and movement. Examination of the role and impact of leadership, skills, and strategies for emerging leaders.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

CS 220 (ENG 220) Survey of Chicano Literature (GT-AH2) 3(3-0)
As Needed.
Survey of outstanding contemporary Chicano works. Literature deals with Chicano themes, including analysis of folklore and myth.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH2) (CC)

CS 230 Chicano: Social & Psychological Study (GT-SS3) 3(3-0)
Fall.
Social and psychological forces faced in the Chicano community.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: SS, GT-SS3) (CC)

CS 235 Ballet Folklorico 3(1-2)
As Needed.
The Mexican Folkloric Ballet class is designed with the interest of learning the history and art of an important part of Mexican culture, "Dance."
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (9).

CS 291 Special Topics (1-3 V)
As Needed.
Topics in Chicano studies, identified by student/faculty interest.
Prerequisite: None.
Corequisite: None.
Registration Information: Prior work in Chicano studies desirable. Repeatable (99).

CS 303 Chicano Labor History in the United States 3(3-0)
As Needed.
Chicano experience in the American labor market from 1848 to present.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CS 306 (WS 306) La Chicana 3(3-0)
Fall, Spring.
A social cultural and historical overview of the Chicana experience and contributions.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CS 325 (SW 325) Health in the Chicano Community 3(3-0)
Spring.
Health care traditions and current health care systems in the barrio.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CS 341 (WS 341) Chicana Writers 3(3-0)
As Needed.
Survey of Chicana writers from the early 1900s to the present. Along with the literature, aspects of history, sociology and politics will be incorporated.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CS 346 (HIST 346) History of Mexico 3(3-0)
Spring, Even.
This course surveys the major political, economic, social and cultural developments of Mexico from pre-Columbian times to the present.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CS 401 (WS 401) Third World Feminisms 3(3-0)
As Needed.
This course focuses on Third World women's challenging views of global feminism and feminist representations of other women.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CS 420 Voices of Protest 3(3-0)
Fall, Spring.
This course will highlight the contributions of people of color throughout the history of the United States.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior level standing.

CS 485 Capstone 3(3-0)
As Needed.
Students will develop a project in which they will develop and execute a research assignment related to ethnicity, gender, or diversity.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior level standing. Permission of instructor.

CS 489 (HIST 489) Borderlands 3(3-0)
Spring, Odd.
History of the Mexican cession to the U.S. from its Indian and Hispanic origins to the present.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CS 491 Special Topics (1-3 V)
As Needed.
Topics in Chicano studies, identified by student/faculty interest.
Prerequisite: None.
Corequisite: None.
Registration Information: Prior work in Chicano studies desirable.
Repeatable (99).

CS 495 Independent Study (1-3 V)
Fall, Spring, Summer.
Special topics dealing with the Chicano and society.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

CS 498 Internship (1-3 V)
Spring.
Practical experience through internships in government, business, and other community organizations.
Prerequisite: None.
Corequisite: None.
Registration Information: For students with advanced standing. Permission of instructor.

Civil Engineering (CE)

CE 101 Introduction to Civil Engineering 2(2-0)
Fall.
Study of civil engineering opportunities, civil engineering design process, professional ethics, professional licensure, trigonometry, basic computer office applications and team works.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

CE 233 Strength of Materials with Lab 3(2-2)
Spring.
A study of the responses of materials to loads with attention to stresses, strains, elastic and plastic responses to beams and columns using analytical methods and calculus. Laboratory testing demonstrate these principles.
Prerequisites: EN 211.
Corequisites: None.
Registration Information: None.

CE 291 Special Topics 1-5(1-5-1-5)
As Needed.
Selected topics in civil engineering.
Prerequisites: None.
Corequisites: None.
Registration Information: Junior status or permission of instructor.

CE 321 Geotechnical Engineering I 3(2-2)
Spring.
Geotechnical engineering fundamentals, in-depth analysis and standard testing related to soil mechanics including permeability, consolidation and OSHA excavation safety.
Prerequisites: CE 233.
Corequisites: None.
Registration Information: None.

CE 331 Structural Analysis 3(3-0)
Fall.
Load calculations including wind and earthquake, and analysis of statically determinate and indeterminate structures including influence lines, approximate analysis, force method and moment distribution.
Prerequisites: CE 233.
Corequisites: None.
Registration Information: None.

CE 341 Introduction to Transportation Engineering 3(2-2)
Spring.
Introduction to transportation systems and study of basic traffic analysis, intersection geometry, roadside and cross-section design, signal design, traffic control and laboratory activities.
Prerequisites: CET 222 or EN 212.
Corequisites: None.
Registration Information: None.

CE 351 Hydraulics with Lab 3(2-2)
Fall.
Study and in-depth analysis of non-compressible fluids using analytical methods and calculus including the flow of water in pipes and open channels. Laboratory involves measuring static pressure, head losses, and flow rates.
Prerequisites: EN 211.
Corequisites: None.
Registration Information: None.

CE 361 Construction Engineering 4(4-0)
Spring.
Basics of engineering economics, project scheduling, earned-value analysis, and project management including business, public policy, leadership, team work, sustainability, professional ethics, and estimating.
Prerequisites: None.
Corequisites: None.
Registration Information: Junior standing or permission of instructor.

CE 391 Special Topics 1-5(1-5-1-5)
As Needed.
Selected topics in civil engineering.
Prerequisites: None.
Corequisites: None.
Registration Information: Junior status or permission of instructor.

CE 395 Independent Study 1-5(1-5-1-5)
As Needed.
Intensive study in civil engineering directed by a faculty member.
Prerequisites: None.
Corequisites: None.
Registration Information: Junior status or permission of instructor.

CE 396 Cooperative Education Placement 1-5(1-5-1-5)
As Needed.
Work experience in civil engineering under the direction of a field supervisor and a faculty member.
Prerequisites: None.
Corequisites: None.
Registration Information: Junior status or permission of instructor.

CE 404 (CET 404) Structural Steel Design 3(3-0)
Fall.
Structural steel design of beams, columns, girders and trusses to AISC standards.
Prerequisites: CE 331 or CET 316.
Corequisites: None.
Registration Information: None.

CE 405 (CET 405) Reinforced Concrete Design 3(3-0)
Spring.
Design of reinforced concrete beams, columns, girders and floor systems to conform to current ACI code.
Prerequisites: CE 331 or CET 316.
Corequisites: None.
Registration Information: None.

CE 412 (CET 412) Hydrology 3(3-0)
Spring.
Hydrologic cycle including precipitation, streamflow, ground-water runoff and the preparation of hydro graphs and frequency analysis.
Prerequisites: CE 351 or CET 317.
Corequisites: None.
Registration Information: None.

CE 415 (CET 415) Water & Sewer System Design 3(3-0)
Fall.
Fundamental principles of water supply and sewage design.
Prerequisites: CE 351 or CET 317 and CHEM 111.
Corequisites: None.
Registration Information: None.

CE 421 Geotechnical Engineering II 3(3-0)
Spring.
Analysis and design of slopes and foundations including retaining wall, shallow footings, deep foundations, pile foundations, mat foundations, earthquake loads, cofferdams, caissons, liquefaction and problems soils.
Prerequisites: CE 321.
Corequisites: None.
Registration Information: None.

CE 473 (CET 473) Highway Design 3(3-0)
Fall.
A study of highway planning and design.
Prerequisites: CE 321 or CET 315 and CE 341 or CET 372 and CET 208 and MATH 126.
Corequisites: None.
Registration Information: None.

CE 487 Senior Project Seminar 1(1-0)
Fall.
Be familiar with engineering analysis & design process in global, economic, environmental, & societal contexts. Create a collaborative and inclusive environment to establish goals, plan tasks & present the senior project.
Prerequisites: None.
Corequisites: None.
Registration Information: Senior standing.

CE 489 Senior Design Project 3(1-4)
Spring.
Application of civil engineering principles to plan, analysis, design, and make an execution plan of a realistic civil engineering project. Students prepare technical reports and make oral presentations.
Prerequisites: CE 487.
Corequisites: None.
Registration Information: None.

CE 491 Special Topics 1-5(1-5-1-5)
As Needed.
Selected topics in civil engineering.
Prerequisites: None.
Corequisites: None.
Registration Information: Senior status or permission of instructor.

CE 495 Independent Study 1-5(1-5-1-5)
As Needed.
Intensive study in civil engineering directed by a faculty member.
Prerequisites: None.
Corequisites: None.
Registration Information: Senior status or permission of instructor.

CE 496 Cooperative Education Placement 1-5(1-5-1-5)
As Needed.
Work experience in civil engineering under the direction of a field supervisor and a faculty member.
Prerequisites: None.
Corequisites: None.
Registration Information: Senior status or permission of instructor.

Civil Engineering Technology (CET)

CET 101 Intro to Civil Engineering Technology 2(1-2)
Fall.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CET 102 Surveying I 3(1-4)
Fall.
Beginning course in plane surveying; covers proper chaining techniques, care and use of engineering levels, differential leveling, traversing, and construction surveying.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CET 103 Surveying II 3(1-4)
Spring.
Introduction to land, topographic, and construction surveying.
Prerequisite: CET 102.
Corequisite: None.
Registration Information: Permission of instructor.

CET 115 Civil Drafting I 3(1-4)
Fall.
An introduction to basic drafting, AutoCAD and Structural Detail drafting.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CET 116 Civil Drafting II 3(1-4)
Spring.
An introduction to maps, traverses, contours, plans and profiles, cut and fills. An introduction to architectural plans, elevations and section.
Prerequisite: CET 115.
Corequisite: None.
Registration Information: None.

CET 202 Statics 3(3-0)
Fall.
Basic concepts and application of static forces, couples, resultants, equilibrium, friction, frames, trusses, free body diagrams, and centroids.
Prerequisite: MATH 122 or MATH 124.
Corequisite: None.
Registration Information: None.

CET 206 Strength of Materials 4(3-2)
Spring.
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.
Corequisite: None.
Registration Information: None.

CET 207 Construction Materials and Methods 3(3-0)
Fall.
Properties, uses and methods of assembly of building materials as they apply to the construction industry.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CET 208 Concrete and Asphalt Materials 3(2-2)
Spring.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CET 222 Dynamics 3(3-0)
Spring.
A study of the basic equations of motion, kinematics, kinetics, momentum, potential energy, work, and highway dynamics.
Prerequisite: CET 202.
Corequisite: None.
Registration Information: None.

CET 226 Engineering Problem Solving 2(1-2)
Fall.
An introduction to computer programming to solve engineering problems that apply to the complete spectrum of civil engineering technology courses.
Prerequisite: CIS 101 and CIS 104 and MATH 120.
Corequisite: None.
Registration Information: None.

CET 303 Construction Management 3(3-0)
Spring.
Job specifications, contractor, organization, bonding, contracts, insurance and labor relations.
Prerequisite: CET 207.
Corequisite: None.
Registration Information: None.

CET 304 Building Cost Estimating 3(3-0)
As Needed.
Estimating related to building construction industry. Quantity take-off, labor and material costs, records and assembling a general contractor's bid.
Prerequisite: CET 303.
Corequisite: None.
Registration Information: None.

CET 305 Heavy/Highway Cost Estimating 3(3-0)
Fall.
Estimating relating to heavy and highway construction. Covers heavy equipment selection and use, project scheduling and production rates.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing. Permission of instructor.

CET 312 Route Surveying 3(2-2)
As Needed.
Highway and route surveys, horizontal and vertical curves, grades, slope staking, and earthwork.
Prerequisite: CET 103 and MATH 124.
Corequisite: None.
Registration Information: None.

CET 315 Soil Mechanics Technology 3(2-2)
Spring.
Basic principles of soil mechanics and foundation design as they apply to design and construction. ATSM field tests will be done in the laboratory.
Prerequisite: CET 206.
Corequisite: None.
Registration Information: None.

CET 316 Structural Analysis 3(3-0)
Fall.
Introduction to the analysis of statically determinate and indeterminate structures.
Prerequisite: CET 206 and MATH 126 and PHYS 201 and PHYS 201L.
Corequisite: None.
Registration Information: None.

CET 317 Hydraulics 3(2-2)
Fall.
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 and MATH 126 and PHYS 201 and PHYS 201L.
Corequisite: None.
Registration Information: None.

CET 372 Traffic Analysis and Control 3(2-2)
Spring.
Introduction to traffic engineering including traffic system characteristics, traffic studies, capacity analysis, and traffic control. Laboratory activities include traffic data collection and analysis.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CET 401 Land Surveying 3(3-0)
As Needed.
Boundary control, property descriptions, deeds, subdivisions, emphasizing the legal aspects of land law and surveying.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CET 404 (CE 404) Structural Steel Design 3(3-0)
Fall.
Structural steel design of beams, columns, girders and trusses to AISC standards.
Prerequisite: CE 331 or CET 316.
Corequisite: None.
Registration Information: None.

CET 405 (CE 405) Reinforced Concrete Design 3(3-0)
Spring.
Design of reinforced concrete beams, columns, girders and floor systems to conform to current ACI code.
Prerequisite: CE 331 or CET 316.
Corequisite: None.
Registration Information: None.

CET 412 (CE 412) Hydrology 3(3-0)
Spring.
Hydrologic cycle including precipitation, streamflow, ground-water runoff and the preparation of hydro graphs and frequency analysis.
Prerequisite: CE 351 or CET 317.
Corequisite: None.
Registration Information: None.

CET 414 Bridge Design 3(3-0)
As Needed.
Design of bridge slabs, beams, abutments, wingwalls, piers, and footings.
Prerequisite: CET 316.
Corequisite: None.
Registration Information: None.

CET 415 (CE 415) Water & Sewer System Design 3(3-0)
Fall.
Fundamental principles of water supply and sewage design.
Prerequisite: CE 351 or CET 317 and CHEM 111.
Corequisite: None.
Registration Information: None.

CET 455 Senior Project Seminar 1(1-0)
Fall.
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: None.
Corequisite: None.
Registration Information: None.

CET 456 Senior Project 3(1-4)
Spring.
Practical realistic projects relating to CET discipline are selected for design, analysis, and execution. Students prepare reports and make oral presentations.
Prerequisite: CET 455.
Corequisite: None.
Registration Information: None.

CET 473 (CE 473) Highway Design 3(3-0)
Fall.
A study of highway planning and design.
Prerequisite: CE 321 or CET 315 and CE 341 or CET 372 and CET 208 and MATH 126.
Corequisite: None.
Registration Information: None.

CET 475 Engineer-In-Training Preparation 3(3-0)
Spring.
This course is designed as preparation for the state Engineer-In-Training examination. Subjects include general engineering and civil engineering topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CET 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CET 495 Independent Study (1-3 V)
Fall, Spring, Summer.
Directed study for students interested in specific areas of CET.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing in CET. Permission of instructor. Repeatable (99).

CET 496 Cooperative Education Placement (1-4 V)
Fall, Spring, Summer.
Industrial cooperative education work experience under the direction of a field supervisor and faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

Communication & Information Design (CID)

CID 103 Speaking & Listening 3(3-0)
As Needed.
Introduces principles of speaking and listening with emphasis on exposition and its application to public speaking.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: H)

CID 204 (ENG 204) Introduction to Rhetoric 3(3-0)
As Needed.
Provides an introduction to the rhetorical tradition in relationship to the needs of various cultural, technological, and professional contexts.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

CID 205 Introduction to User Experience 3(3-0)
Spring.
Course introduces the techniques and principles for measuring and improving the user's experience with digital documents, such as web pages and mobile applications.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CID 212 Rhetorical Persuasion & Argumentation 3(3-0)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CID 221 Interpersonal Communication (GT-SS3) 3(3-0)
As Needed.
The principles and skills of speaking, applied to informal speaking situations. Topics covered include openness, genuineness, and talking appropriately to people.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(GT-SS3)

CID 230 Document Design 3(3-0)
As Needed.
Course emphasizes the analysis, design, and creation of ethically sound and rhetorically effective print and digital documents.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CID 260 Language Acquisition & Linguistics 3(3-0)
As Needed.
Normal processes of development of language in children, growth of language, including structure, comprehension, use of oral and written language, other symbolic behavior.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CID 291 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CID 295 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CID 335 (WS 335) Gender & Communication 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: None.

CID 345 Intercultural Communication 3(3-0)
As Needed.
The purpose of this course is to explore Intercultural Communication with the intent to better understand and appreciate cultural differences.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CID 350 Communicating in Professions 3(3-0)
As Needed.
Introduces the basics of professional communication in the workplace. The course attends to both theory and practice in interpersonal, small group, organizational and intercultural communication.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing.

CID 376 User Experience Design 3(3-0)
Fall.
Course familiarizes students with the commonly accepted principles of design that influence how digital texts look and act.
Prerequisite: CID 205.
Corequisite: None.
Registration Information: None.

CID 377 Usability & User Experience 3(3-0)
Spring.
Course familiarizes students with the methods, techniques, and tools for collecting the data used to measure User Experience, specifically usability testing.
Prerequisite: CID 205.
Corequisite: None.
Registration Information: None.

CID 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CID 493 Seminar 3(3-0)
As Needed.
This course will synthesize skills learned in the minor exposing students to theories and practices of communication training and development with an applied focus.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing.

CID 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

CID 583 Contemporary Cultural Communication 3(3-0)
As Needed.
The purpose of this course is to explore Intercultural Communication with the intent to better understand and appreciate cultural differences.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

Communities to Build Active STEM Engagement (CBSE)

CBSE 291 Special Topics 0.5(1-3)
As Needed.
Provides students with a support network to learn, develop, and receive feedback on their scientific growth throughout the CBASE program.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CBSE 491 Special Topics 0.5(1-3)
As Needed.
Provides students with a support network to learn, develop, and receive feedback on their scientific growth throughout the CBASE program.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

Computer Information Systems (CIS)

CIS 100 Introduction to Word 1(1-0)
Fall, Spring, Summer.
A competency-based course, topics include: file management, formatting, fonts, editing, reports, footnotes, desktop publishing, clip art, styles, outlines, tables, and mail merge.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 101 CIS Careers & Opportunities 1(1-0)
As Needed.
This course touches the various fields and career opportunities in Computer Information Systems.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 103 Introduction to PowerPoint 1(1-0)
Fall, Spring, Summer.
An introduction to PowerPoint which includes presentation templates, charts, object embedding, slide shows and other details in enhancing communications via presentation software.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 104 Introduction to Excel Spreadsheets 1(1-0)
Fall, Spring, Summer.
Includes worksheet design, text and formula manipulation, charts, lists, pivot tables, ranges, lookup tables, data analysis, functions, and macros.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 105 Introduction to Access DBMS 1(1-0)
Fall, Spring, Summer.
Course includes relational database design, table creation, data manipulation, queries, forms, reports, web access, and interface design.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 120 Introduction to Programming with Python 3(3-0)
Fall.
This course introduces students to the basic concepts in programming through the Python language. Throughout the course there are multiple opportunities for students to practice the programming and debugging process.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

CIS 150 Introduction to Computer Information Systems 3(3-0)
Fall, Spring.
An examination of the information systems industry. Topics covered include technologies, tools, processes, systems, and careers. Also includes discussion of relevant societal and ethical issues.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 171 Introduction to Java Programming 4(3-2)
Fall, Spring, Summer.
An introduction to secure computer programming, design, and testing using the Java object-oriented programming language. Topics include language constructs, functions, file handling, and inheritance.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 185 PC Architecture 3(2-1)
Fall, Spring.
In depth study of personal computer hardware, peripherals, and interfaces. Course examines processors, disk drives, buses, video cards, memory and diagnostic software.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 210 Introduction to Cyber Security 3(2-2)
Spring.
CIS210 is an introductory and overview course for the principles and application of cyber security concepts and techniques. This course will analyze both the technical and non-technical fundamentals of cyber security.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 240 Systems Analysis & Design 3(3-0)
Fall.
Practical methods for analyzing business problems and designing contemporary secure information systems solutions using various methodologies, techniques, skills, and tools.
Prerequisite: CIS 171.
Corequisite: None.
Registration Information: None.

CIS 250 Introduction to Business Analytics 3(3-0)
Fall, Spring, Summer.
An introduction to the processes needed to formulate and solve business problems and to support managerial decision making using MS Excel Spreadsheets and Excel add-ins.
Prerequisite: None.
Corequisite: None.
Registration Information: MS Word, Excel and PowerPoint Competency.

CIS 271 Advanced Program Design with Java 4(3-2)
Spring.
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.
Corequisite: None.
Registration Information: None.

CIS 289 Network Concepts 3(2-2)
Fall.
Fundamental hardware, software, data communication, and cyber security concepts necessary for designing and securing computer networks and computing environments.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 290 Special Projects (1-5 V)
As Needed.
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: None.
Corequisite: None.
Registration Information: Sophomore standing. Permission of instructor. Repeatable (3).

CIS 291 Special Topics (1-5 V)
As Needed.
Study of new and emerging topics and technologies in the computing field.
Prerequisite: None.
Corequisite: None.
Registration Information: Sophomore standing. Repeatable (3).

CIS 298 Internship (1-5 V)
As Needed.
IT-related industrial work experience under the direction of a field supervisor and faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

CIS 311 Introduction to Web Development 3(3-0)
Fall.
This course provides hands-on experience in designing and securing Web-based applications. It applies the latest web technologies to create, debug and publish secure web applications.
Prerequisite: CIS 171.
Corequisite: None.
Registration Information: None.

CIS 315 Linux Fundamentals 3(3-0)
Fall.
Explore Linux features, including shell commands and shell scripts, file system and directory structures, text editors, processes, regular expression, and other system administration topic such as file ownership and permissions.
Prerequisite: CIS 171.
Corequisite: None.
Registration Information: None.

CIS 350 Database Management 3(3-0)
Fall.
Design, implementation and use of database 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.
Corequisite: None.
Registration Information: Permission of instructor.

CIS 359 Advanced Programming with C# 3(3-0)
Spring.
Design and develop desktop and web-based applications using C# and .NET. Emphasis on advanced programming concepts and technique, and secure coding practices.
Prerequisite: CIS 171.
Corequisite: None.
Registration Information: None.

CIS 365 Management Information Systems 3(3-0)
As Needed.
Introduction to application and management of IT in functional business areas (marketing, finance, accounting, etc.). Topics include IT strategy, business intelligence, e-commerce, and cyber security.
Prerequisite: CIS 103 and CIS 104 and MGMT 201.
Corequisite: None.
Registration Information: Open to non-CIS majors only.

CIS 383 E-Commerce 3(3-0)
As Needed.
This course focuses on key issues including e-commerce strategy, business models, technology infrastructure, security and payment systems, e-marketing, and ethical behavior.
Prerequisite: MGMT 201.
Corequisite: None.
Registration Information: Junior standing.

CIS 386 Android Application Development (3 V)
Fall.
Secure development of Android applications using advanced Java programming concepts for the Android devices.
Prerequisite: CIS 271.
Corequisite: None.
Registration Information: None.

CIS 401 Network Systems Administration 3(2-2)
Spring.
Introduces the necessary knowledge and skills to install, configure, manage, and secure network operating systems, preparing students to be system administrators in a networking environment.
Prerequisite: CIS 289.
Corequisite: None.
Registration Information: None.

CIS 410 Data Analytics with Python 3(3-0)
Fall.
Using Python programming language as a tool to solve the problems in Data Analytics such as data visualization, natural language processing, database handling, and machine learning.
Prerequisite: CIS 171.
Corequisite: None.
Registration Information: None.

CIS 411 Internet Server-Side Programming (3 V)
Spring.
Secure 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 and CIS 350.
Corequisite: None.
Registration Information: None.

CIS 432 Senior Professional Project 6(3-6)
Spring.
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: MGMT 368.
Corequisite: None.
Registration Information: Must have completed CIS core.

CIS 450 Advanced Data Analytics 3(3-0)
Spring.
Emphasis on cutting-edge applications, tools, techniques, and trends in Data Analytics such as data visualization, interactive dashboard, Artificial Intelligence, Machine Learning, and Big Data architecture.
Prerequisite: CIS 350.
Corequisite: None.
Registration Information: Permission of instructor.

CIS 460 Cyber Security & Defense (3 V)
Spring.
Students will understand the impact of cyber threats to critical IT resources. Topics include defense-in-depth safeguards, threat vulnerability asset analysis, and secure programming.
Prerequisite: CIS 289.
Corequisite: None.
Registration Information: None.

CIS 461 IT Security Risk Management 3(3-0)
Fall.
Overview of cyber security threats to operations, hardware, software, assessment of cyber security risk, risk mitigation strategies, disaster recovery planning, and cyber security law.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CIS 462 Computer Forensics 3(2-2)
Fall.
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.
Corequisite: None.
Registration Information: None.

CIS 470 Virtualization & Cloud Technologies 3(2-2)
Spring.
This course provides students with the knowledge and skills to install and configure various cloud and virtualization technologies. Course topics include hardware virtualization, OS virtualization, and cloud platforms.
Prerequisites: CIS 315.
Corequisites: None.
Registration Information: None.

CIS 490 Special Projects (1-5 V)
As Needed.
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: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

CIS 491 Special Topics 1-5(1-5-1-5)
As Needed.
Study of new and emerging topics and technologies in the computing field.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing. Repeatable (9).

CIS 493 Senior Seminar 1(1-0)
Fall.
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: None.
Corequisite: CIS 432.
Registration Information: Must have completed CIS core.

CIS 498 Internship (1-6 V)
As Needed.
IT-related industrial work experience under the direction of a field supervisor and faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior Standing. Repeatable (6).

CIS 510 Data Analytics with Python 3(3-0)
As Needed.
Using Python programming language as a tool to solve the problems in Data Analytics such as data visualization, natural language processing, database handling, and machine learning.
Prerequisite: CIS 171.
Corequisite: None.
Registration Information: Permission of instructor.

CIS 532 Professional Project 6(3-6)
As Needed.
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: MGMT 368.
Corequisite: None.
Registration Information: Must have completed CIS core.

CIS 550 Advanced Data Analytics 3(3-0)
Spring.
Emphasis on cutting-edge applications, tools, techniques, and trends in Data Analytics such as data visualization, interactive dashboard, Artificial Intelligence, Machine Learning, and Big Data architecture.
Prerequisite: CIS 240 or CIS 350.
Corequisite: None.
Registration Information: Permission of instructor.

CIS 560 Cyber Security & Defense (3 V)
Spring.
Students will understand the impact of cyber threats to critical IT resources. Topics include defense-in-depth safeguards, threat vulnerability asset analysis, and secure programming.
Prerequisite: CIS 289 or permission of instructor.
Corequisite: None.
Registration Information: Permission of instructor.

CIS 561 IT Security Management 3(3-0)
Spring.
Overview of cyber security threats to operations, hardware, software; assessment of cyber security risk, risk mitigation strategies, disaster recovery planning, cyber security law.
Prerequisite: Any Introduction to Management course.
Corequisite: None.
Registration Information: Introduction to MGMT course strongly recommended as prerequisite.

CIS 562 Computer Forensics 3(2-2)
Fall.
Students will learn computer forensics, business continuity planning, incident response, 3rd party contractual agreements with response agencies, Case Law and detection, and isolation response to info security.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

CIS 565 Management Information Systems 3(3-0)
Fall, Spring.
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: CIS 100 and CIS 103 and CIS 104 and MGMT 201.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

CIS 583 E-Commerce 3(3-0)
As Needed.
This course focuses on key issues including e-commerce strategy, business models, technology infrastructure, security and payment systems, e-marketing, and ethical behavior.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

CIS 591 Special Topics (1-5 V)
As Needed.
Study of new and emerging topics and technologies in the computing field.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

Construction Management (CM)

CM 101 Intro to Construction Management 2(1-2)
Fall.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CM 231 Statics and Structures 4(4-0)
Fall.
An introduction to statics, strength of materials, and theory of structures, its applications to building construction and the use of trigonometry in solution of statics problems.
Prerequisite: PHYS 201 and PHYS 201L.
Corequisite: None.
Registration Information: None.

CM 320 Soils in Construction 3(2-2)
Spring.
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.
Corequisite: None.
Registration Information: None.

CM 330 Wood Structural Systems 3(2-2)
Fall.
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.
Corequisite: None.
Registration Information: None.

CM 341 Concrete and Steel Structures 4(3-2)
Spring.
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.
Corequisite: None.
Registration Information: None.

CM 351 Construction Planning & Scheduling 3(2-2)
Spring.
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 303.
Corequisite: None.
Registration Information: None.

CM 391 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CM 437 LEED Lab 3(2-2)
As Needed.
LEED Lab is designed to further people-wide focus on sustainability and green building through hands-on applications for LEED (Leadership in Energy, Environment, and Design) certification.
Prerequisites: CET 303.
Corequisites: None.
Registration Information: None.

CM 445 Construction Safety 2(2-0)
Spring.
The study of safe construction techniques, workers compensation insurance, OSHA regulations and requirements, cost of accidents, and ethical conduct regarding safety.
Prerequisite: CET 207.
Corequisite: None.
Registration Information: None.

CM 451 Mechanical & Electrical Systems 4(4-0)
Fall.
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: CET 207 and PHYS 201.
Corequisite: None.
Registration Information: None.

CM 461 Construction Law 3(3-0)
Fall.
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.
Corequisite: None.
Registration Information: None.

CM 465 Construction Accounting & Finance 3(3-0)
Spring.
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: ACCT 201.
Corequisite: None.
Registration Information: None.

CM 475 Senior Project 3(1-4)
Spring.
An exercise in construction project analysis, cost estimating, scheduling, and the preparation and professional presentation of a project bid package for an organization.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing in CM. Must be within 2 semesters of graduation.

CM 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CM 495 Independent Study (1-3 V)
Fall, Spring.
Directed study for students interested in a specific area of CM.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (2).

Continuing Education (CNED)

CNED 100 Workshop (20 V)
As Needed.
Activity-orientated experience for professional in a variety of fields.
Prerequisite: None.
Corequisite: None.
Registration Information: Will not receive academic credit. Can be used for Continuing Education Units (CEU). Course subtitle may vary.

CNED 201 Professional Development (20 V)
As Needed.
Activity-orientated experience for professional in a variety of fields.
Prerequisite: None.
Corequisite: None.
Registration Information: Will not receive academic credit. Can be used for Continuing Education Units (CEU). Course subtitle may vary.

CNED 401 Professional Development (20 V)
As Needed.
Activity-orientated experience for professional in a variety of fields, designed for higher level.
Prerequisite: None.
Corequisite: None.
Registration Information: Will not receive academic credit. Can be used for Continuing Education Units (CEU). Course subtitle may vary.

CNED 500 Workshop (20 V)
As Needed.
Activity-orientated experience for professional in a variety of fields, designed for post-graduate level.
Prerequisite: None.
Corequisite: None.
Registration Information: Will not receive academic credit. Can be used for Continuing Education Units (CEU). Course subtitle may vary.

CNED 501 Professional Development (20 V)
As Needed.
Activity-orientated experience for professional in a variety of fields, designed for post-graduate level.
Prerequisite: None.
Corequisite: None.
Registration Information: Will not receive academic credit. Can be used for Continuing Education Units (CEU). Course subtitle may vary.

Continuous Registration (CR)

CR 500 Continous Registration (0 V)
Continuous Registration

Creative Wellness (CW)

CW 100 Introduction to Creative Wellness 3(3-0)
As Needed.
Students are introduced in this survey course to the interdisciplinary study of positive psychology applied to the arts and humanities to promote emotional and psychological well-being.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CW 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

Criminology (CRIM)

CRIM 101 Introduction to Criminology 3(3-0)
Fall, Spring.
This class will address the historical, theoretical and methodological foundations for understanding crime and criminology; various types of crime, & responses to crime by police, the courts and correctional institutions.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 203 (SOC 203) The Criminal Justice System 3(3-0)
Spring.
Critical study of the U.S. criminal justice system, its historical, social & institutional context, & its structure & functioning. Influence of law, process & social justice on police, court, corrections, & victim services.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

CRIM 205 (SOC 205) Research Methods 3(3-0)
Fall, Spring.
Introduces methods of research and investigation in sociology, criminology, and the social sciences.
Prerequisite: CRIM 101 or SOC 101.
Corequisites: None.
Registration Information: None.

CRIM 212 (ANTH 212) The Forensics of Bones 3(3-0)
As Needed.
An examination of the basic procedures used by forensic anthropologists to obtain evidence in criminal investigations.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

CRIM 252 (SOC 252) Understanding Lived Experiences 3(3-0)
As Needed.
Explores lived experiences using a sociological lens. Students learn to understand their own & others' lives in new ways through applying concepts such as social norms, stigma, social control, privilege & intersectionality.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

CRIM 261 (SOC 261) Introduction to Cannabis Studies 3(3-0)
Fall.
Introduces students to the social scientific study of cannabis and its complicated relationship to society. Emphasis on sociological and criminological topics including changes in the legal and popular perception of cannabis.
Prerequisite: None.
Corequisites: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

CRIM 275 Law & Procedure for Peace Officers 3(3-0)
As Needed.
Content on diversity, law, policy, communication, and police procedures. Course is reserved for Peace Officers completing the Police Academy. Credit is awarded concurrently in Criminology, Political Science, and Social Work.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 291 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

CRIM 303 (SOC 303) Deviance 3(3-0)
As Needed.
Patterns & causes associated with behavior, conditions, beliefs, & other social characteristics defined &/or treated as socially deviant, including but not limited to political, sexual, cultural, & organizational deviance.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

CRIM 304 (SOC 304) Race and Crime 3(3-0)
As Needed.
Explores historical and contemporary intersecting issues of race and crime in the United States. Theoretical grounding and factual information provide the foundation for the course.
Prerequisite: CRIM 101 or CRIM 203 or SOC 101 or SOC 203.
Corequisites: None.
Registration Information: None.

CRIM 305 (SOC 305, WS 305) Women & Crime 3(3-0)
As Needed.
A critical examination of the historical and contemporary intersecting issues of sex, gender, and crime, focusing on girls' and women's experiences as victims, offenders, and workers in the criminal justice system.
Prerequisite: ANTH 100 or CRIM 101 or SOC 101 or WS 100.
Corequisites: None.
Registration Information: None.

CRIM 306 (SOC 306) Delinquency and Juvenile Justice 3(3-0)
Fall.
Theoretical and historical study of delinquency, intersectionality, and social justice. Family, peer, school, community, and cultural contexts and juvenile law, courts, policing, and youth corrections are examined.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 310 Criminological Theory 3(3-0)
Fall, Spring.
Examination of major theoretical explanations of crime and their policy implications.
Prerequisite: CRIM 101.
Corequisite: None.
Registration Information: None.

CRIM 321 (ANTH 321, SOC 321) Cross-Cultural Perspective on Crime 3(3-0)
As Needed.
An examination of crime in non-western societies with a comparison to crime and punishment in modern American society.
Prerequisite: ANTH 100 or CRIM 101 or SOC 101.
Corequisites: None.
Registration Information: None.

CRIM 335 (SOC 335) Advanced Research Methods 3(3-0)
As Needed.
Advanced course in qualitative & quantitative social science research methods. Focus on critical examination of the logic underlying social inquiry, the ethics of social research, & developing practical skills.
Prerequisites: CRIM 205 or SOC 205.
Corequisites: None.
Registration Information: None.

CRIM 353 Penology 3(3-0)
As Needed.
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: CRIM 101 or CRIM 203 or SOC 101 or SOC 203.
Corequisite: None.
Registration Information: None.

CRIM 357 (ANTH 357, SOC 357) Immigration 3(3-0)
As Needed.
Examines migration processes, with a particular focus on immigration to the United States. Migration patterns are analyzed considering social, political, and historical context, including structural global patterns.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

CRIM 361 (SOC 361) Advanced Cannabis Studies 3(3-0)
Spring.
In-depth exploration of prominent cannabis studies topics. Students will complete projects featuring cannabis research, business, political action/social justice, and creative works.
Prerequisite: CRIM 261 or SOC 261.
Corequisites: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

CRIM 374 (SOC 374) Crime in Film 3(3-0)
Spring.
Employ theoretical perspectives to better understand motivations of Hollywood criminals and the peculiar aspects of a society with an insatiable appetite for crime as "entertainment".
Prerequisite: None.
Corequisites: None.
Registration Information: None.

CRIM 376 Crime & Society in Science Fiction 3(3-0)
Summer.
This course focuses on sociological understandings of crime and other social phenomena. Through science fiction literature, movies, and TV, the class explores how current social realities are reflected in science fiction.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 401 Crime, Law, & Justice Studies 3(3-0)
As Needed.
Study of contemporary issues in criminology, law, & justice. Topics may vary from semester to semester. The class may be repeated for a maximum of 6 credits, but no single topic may be repeated. Example: human trafficking.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing. Repeatable (6).

CRIM 405 (SOC 405) Law & Society 3(3-0)
Spring.
The origins and functions of law; the social organization of legal institutions and decisions; the relationship of law to morality, justice and social change.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 407 (WS 407) Family Violence 3(3-0)
As Needed.
The extent, seriousness, and impact of major forms of family violence, including child maltreatment, dating and partner violence, stalking, and mistreatment of elders. Gender, race and social class implications are examined.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 409 Victimology (3 V)
Spring.
Study of victims with a focus on victims of officially defined crime. Examination of social changes impacting cultural views and the societal response to victims as well as the costs and consequences of victimization.
Prerequisite: CRIM 101 or CRIM 203 or SOC 101 or SOC 203.
Corequisite: None.
Registration Information: None.

CRIM 410 Structural & Elite Crime 3(3-0)
Fall.
Examination of crimes and social injuries perpetrated by organizational structures that do physical or economic harm to the environment, their employees, and their customers.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 411 Police and Society 3(3-0)
As Needed.
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: CRIM 101 or CRIM 203 or SOC 101 or SOC 203.
Corequisite: None.
Registration Information: None.

CRIM 413 Patterns of Homicide 3(3-0)
As Needed.
Examines the rates, types, patterns, and explanation of homicide in the United States and selected other countries.
Prerequisite: CRIM 101 or CRIM 203 or SOC 203.
Corequisite: None.
Registration Information: None.

CRIM 415 Forensic Criminology 3(3-0)
As Needed.
This course introduces students to the application of science to the justice system. It provides beginning levels and fundamental background in forensic criminology as well as criminal investigation.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 418 (SOC 418) Crime, Drugs, & Social Policy 3(3-0)
As Needed.
This course examines the ways in which crime and drug policy is formulated, articulated, implemented, and evaluated.
Prerequisite: CRIM 101 or CRIM 203 or SOC 101 or SOC 203.
Corequisite: None.
Registration Information: None.

CRIM 422 Terrorism and Mass Murder 3(3-0)
As Needed.
Examines mass murder, genocide, and terrorism around the world and assesses current control initiatives.
Prerequisite: CRIM 101 or SOC 101.
Corequisite: None.
Registration Information: None.

CRIM 425 Gangs in Contemporary America 3(3-0)
As Needed.
Trends, organizational characteristics, processes, and causative factors associated with gangs in contemporary American society.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 426 (SOC 426) Collective Violence and Rioting 3(3-0)
Summer.
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: CRIM 101 or SOC 101.
Corequisite: None.
Registration Information: None.

CRIM 455 (WS 455) Hate Crimes 3(3-0)
As Needed.
Examines assumptions about race, ethnicity, gender, sexuality, religion, nationality & other factors that are used to justify the bias behind hate crimes; examines social/legal definitions, causal factors & consequences.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CRIM 491 Special Topics 1-3(1-3-0)
As Needed.
Special topics in criminology.
Prerequisites: None.
Corequisites: None.
Registration Information: May not repeat the same topic. Repeatable (18).

CRIM 492 Research (1-3 V)
As Needed.
Directed study for students interested in gaining research experience in criminology.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of Instructor. Repeatable (12).

CRIM 494 Field Experience (1-12 V)
As Needed.
Practical on-the-job experience in an agency setting.
Prerequisite: None.
Corequisite: None.
Registration Information: Criminology major. Junior standing. Permission of instructor. Repeatable (12).

CRIM 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Criminology major or minor. Permission of instructor. Repeatable (9).

Culturally & Linguistically Diverse Education (CLDE)

A grade of C or better is required for prerequisite courses.

CLDE 294 Field Experience (1-12 V)
As Needed.
Field experience in a linguistically diverse educational setting appropriate to lower division students.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (24).

CLDE 400 Workshop (1-3 V)
As Needed.
Development of classroom materials and curriculum in linguistically diverse education.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

CLDE 401 Teaching English Language Learners 3(3-0)
As Needed.
Methods and techniques of teaching English to children of linguistically diverse backgrounds; K-6 and 7-12 focus.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

CLDE 403 Content Instruction for EL Learners 3(3-0)
Fall.
Methods and techniques for teaching content area subjects to students of linguistically different backgrounds; K-6 and 7-12 focus.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to Education.

CLDE 420 Literacy for Eng Lang Learners 3(3-0)
Summer.
Methods and techniques of teaching Literacy to K-12 English Language Learners.
Prerequisite: None.
Corequisites: None.
Registration Information: Admission to school of education. Field experience required.

CLDE 460 Assess & Admin of Ling Div Ed 3(3-0)
Summer.
Study of state, federal, and local laws and policies concerning CLDE programs; language proficiency instruments used by teachers for assessment and placement of LDE students.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

CLDE 481 Practicum with English Learners (1-6 V)
As Needed.
Supervised practicum and seminar.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education or graduate standing. Repeatable (99).

CLDE 494 Field Experience (1-6 V)
As Needed.
Field Experience in an educational setting related to culturally and linguistically diverse education.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (99).

CLDE 495 Independent Study (1-3 V)
As Needed.
Independent study options for the student specializing in culturally and linguistically diverse education.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (99).

CLDE 500 Workshop (1-3 V)
As Needed.
Practical in development of classroom materials/curriculum in linguistically diverse education.
Prerequisites: None.
Corequisites: None.
Registration Information: Not applicable to the M.Ed. Repeatable (99).

CLDE 501 Graduate Topics in Culturally & Ling. Div. Ed. 0.5-3(0.5-3-0)
As Needed.
Graduate topics in culturally and linguistically diverse education. Each has a subtitle; no subtitle may be repeated for credit.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate standing. Counts for M.Ed. credit with approval of Program Director. Repeatable (99).

CLDE 502 Teaching English Language Learners 3(3-0)
As Needed.
Methods and techniques of teaching English to children of linguistically diverse backgrounds; K-6 and 7-12 focus.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education or graduate standing. Field experience required.

CLDE 503 Content Instruction for EL Learners 3(3-0)
Fall.
Methods and techniques for teaching content area subjects to students of linguistically different backgrounds; K-6 and 7-12 focus.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Field experience required.

CLDE 520 Literacy for Eng Lang Learners 3(3-0)
Summer.
Methods and techniques of teaching Literacy to K-12 English Language Learners.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to the School of Education. Field experience required.

CLDE 523 (ENG 523) Syntax for TESL/TEFL 3(3-0)
As Needed.
Introduction to English syntactic structures relevant to ESL/EFL teaching. Includes an examination of core English structures from various perspectives.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

CLDE 530 (ENG 530) Language Acquisition & Linguistics 3(3-0)
As Needed.
Development of English language from childhood through adulthood, including phonology, grammar, vocabulary, and communicative competence. Acquisition of English as a second language.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

CLDE 553 (ENG 553) Language in the USA 3(3-0)
As Needed.
Explores language use in the U.S. and examines current language-related myths and issues in the U.S., including issues related to indigenous languages and immigrant languages.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

CLDE 560 Ling Div Assess & Admin 3(3-0)
Summer.
Study of state, federal, and local laws and policies concerning CLDE programs; language proficiency instruments used by teachers for assessment and placement of LDE students.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education or graduate standing.

CLDE 581 Practicum with English Learners (1-6 V)
As Needed.
Supervised practicum and seminar.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Repeatable (99).

CLDE 591 Special Topics (1-12 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to the School of Education.

CLDE 594 Field Experience (1-12 V)
As Needed.
Field Experience in an educational setting related to culturally and linguistically diverse education.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate status. Repeatable (99).

CLDE 595 Independent Study (1-3 V)
As Needed.
For the student specializing in culturally and linguistically diverse education.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate standing. Repeatable (99).

Diversity Studies (DS)

DS 105 (ANTH 105, PSYC 105, SOC 105, WS 105) Understanding Human Diversity 3(3-0)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

DS 201 Diversty & Inclusion Class Race Gender & Sexuality 3(3-0)
As Needed.
Introduces key dimensions related to social diversity. Examines individual identity & the intersectionality of social identities focusing on social class, race, ethnicity, nationality, gender, & sex.
Prerequisite: None.
Corequisite: None.
Registration Information: Strongly recommended that students take DS 105 before taking this class. DS 105, DS 201, and DS 202 are required classes for the Diversity Studies certificate.

DS 202 Disability, Age, Religion & Inclusivity 3(3-0)
As Needed.
Examines individual identity & the intersectionality of social identities focusing on disability, religion & age while incorporating relevant sociological theory. Frameworks supporting a more inclusive society are considered.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

DS 485 Capstone 3(3-0)
As Needed.
Students will develop a project in which they will develop and execute a research assignment related to ethnicity, gender, or diversity.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior level standing and permission of instructor.

Early Childhood Education (ECE)

ECE 101 Introduction to Early Childhood Ed 3(3-0)
As Needed.
Provides an introduction to the profession of Early Childhood Education.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECE 102 Intro to ECE Lab Techniques 3(2-2)
As Needed.
Field work in a child care setting (60 hours). The supervised placement provides the student with the opportunity to observe children, practice appropriate interactions, and develop effective management techniques.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECE 103 Guidance Strat for Young Children 3(3-0)
As Needed.
Explores guidance theories, applications, goals, and techniques, as well as factors that influence behavioral expectations of children.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECE 111 Infant & Toddler Theory & Practice 3(3-0)
As Needed.
Presents an overview of theories, applications (including observations), and issues pertinent to infant and toddler development in group and/or family settings.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECE 205 Nutrition, Health and Safety 3(3-0)
As Needed.
Focuses on nutrition, health and safety as a key factor for optimal growth and development of young children.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECE 241 Admin: Human Relations for ECE 3(3-0)
As Needed.
Focuses on the human relations component of an early childhood professional's responsibilities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECE 294 Field Experience (1-12 V)
As Needed.
Field experience in an Early Childhood Education setting.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ECE 350 Programs for ECE 3(3-0)
Fall.
Explores the different programs available for children in the ECE age range, both in and out of a school setting.
Prerequisite: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 355 Play & Creative Expression in ECE 3(3-0)
As Needed.
Focuses on principles and methods for using meaningful play and creative arts experiences across the early childhood curriculum to enhance the development of basic skills.
Prerequisite: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 420 Involving Diverse Families in ECE 3(3-0)
As Needed.
Explores the theoretical foundations and practical applications of family diversity and parent involvement in early childhood education.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 425 Intro to EC Spec Ed 3(3-0)
As Needed.
Explores educating young children with disabilities or special needs in the early childhood setting.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 430 Teaching Young CLD Children 3(3-0)
As Needed.
Explores the research and best practices of teaching young children with culturally and linguistically diverse backgrounds (Birth-3rd grade).
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 440 Effective Instr in Early Literacy 3(3-0)
As Needed.
Explores the development of reading, writing, listening, speaking, and doing in ECE including a review of current research on environmental factors that enhance or reduce language literacy acquisition and development.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 460 Managing ECE Classrooms 2(2-0)
As Needed.
Explores components of effective classroom management procedures with young children in groups. Topics include theoretical perspectives, rules and organization, pro-social behavior, and effective pedagogical decisions.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 461 Teaching ECE Social Studies 2(2-0)
As Needed.
This course teaches teachers of young children the subject area of social studies in the K-3 curriculum. Content knowledge and teaching strategies will be the focus of the course.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 462 Teaching ECE Reading 3(3-0)
As Needed.
This course encompasses how to teach reading in the K-3 curriculum. Content knowledge and teaching strategies will be the focus of the course.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Requires 30 hours of field experience.

ECE 463 Teaching ECE Math 2(2-0)
As Needed.
This course encompasses mathematics in the K-3 curriculum. Content knowledge and teaching strategies will be the focus of the course.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. 30 hours of field experience are required.

ECE 464 Teaching ECE Science 2(2-0)
As Needed.
This course teaches teachers of young children the subject area of science in the K-3 curriculum. Content knowledge and teaching strategies will be the focus of the course.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 485 Capstone in ECE 1(1-0)
As Needed.
Explores substantive issues facing new ECE teachers including job search skills, meeting the needs of at-risk students, creating equitable learning environments, and methods of inquiry in education.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ECE 486 Student Teaching in ECE (6-12 V)
As Needed.
Student Teaching at the K-3 level.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ECE 491 Special Topics 1-3(1-3-0)
As Needed.
Special topics in early childhood education. Each has a subtitle; no subtitle may be repeated for credit.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (99).

ECE 493 Seminar 3(3-0)
As Needed.
Seminar in Early Childhood Education (for non-licensure ECE majors). Focuses on ensuring high-quality internships in ECE and meeting state requirements for desired credentials.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 494 Field Experience (1-12 V)
As Needed.
Upper division field experience in an Early Childhood Education setting.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (99).

ECE 495 Independent Study 1-3(1-3-0)
As Needed.
Independent Study.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (99).

ECE 498 Internship 9(9-0)
As Needed.
Internship in an Early Childhood Education setting (for non-licensure ECE majors) including completion of a major project and presentation of results.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 501 Graduate Topics in Early Childhood Education 0.5-3(0.5-3-0)
As Needed.
Graduate topics in early childhood education. Each has a subtitle; no subtitle may be repeated for credit.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate standing. Counts for M.Ed. credit with approval of Program Director. Repeatable (99).

ECE 520 Adv Mthds Involving Div Fam in ECE 3(3-0)
As Needed.
An advanced exploration of the theoretical foundations and practical applications of family diversity and parent involvement in early childhood education.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 525 Practices in EC Special Education 3(3-0)
As Needed.
An advanced exploration of educating young children with disabilities or special needs in the early childhood setting.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 530 Adv Mthds of Tchg CLD Children 3(3-0)
As Needed.
An advanced exploration of the research and best practices of teaching young children with culturally and linguistically diverse backgrounds (Birth-3rd grade).
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 540 Adv Mthds of Effect Inst Early Lit 3(3-0)
As Needed.
An advanced exploration of the development of reading, writing, listening, speaking, and doing in ECE including factors that enhance or reduce language literacy acquisition and development.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 550 Adv Exploration of Programs for ECE 3(3-0)
As Needed.
An advanced exploration of the different programs available for children in the ECE age range, both in and out of a school setting.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 555 Advanced Play & Creativity in ECE 3(3-0)
As Needed.
Focuses on developing advanced principles and methods for using meaningful play and creative arts experiences across the early childhood curriculum to enhance the development of basic skills.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 560 Adv Management of ECE Classrooms 2(2-0)
As Needed.
An advanced exploration of effective classroom management procedures with young children in groups. Includes theoretical perspectives, rules and organization, pro-social behavior, and effective pedagogical decisions.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

ECE 561 Adv Mthds of Tchg ECE Soc Stud 2(2-0)
As Needed.
An advanced exploration of how to teach young children the subject area of social studies in the K-3 curriculum. Content knowledge and teaching strategies will be the focus of the course.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 562 Adv Mthds of Tchg ECE Reading (3 V)
As Needed.
An advanced exploration of the methods of teaching language arts in the K-3 curriculum with a focus on reading. Content knowledge and teaching strategies will be the focus of the course.
Prerequisites: None.
Corequisites: None.
Registration Information: Includes 30 hours of field work.

ECE 563 Adv Mthds of Tchg ECE Math 2(2-0)
As Needed.
An advanced exploration of how to teach young children the subject area of mathematics in the K-3 curriculum. Content knowledge and teaching strategies will be the focus of the course.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 564 Adv Mthds of Tchg ECE Science 2(2-0)
As Needed.
An advanced exploration of how to teach young children the subject area of science in the K-3 curriculum. Content knowledge and teaching strategies will be the focus of the course.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Includes 30 hours of field work.

ECE 591 Special Topics 1-3(1-3-0)
As Needed.
Special topics in early childhood education. Each has a subtitle; no subtitle may be repeated for credit. Can count for M.Ed. with approval of Program Director.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (99).

ECE 594 Field Experience (1-12 V)
As Needed.
Field Experience in an early childhood educational setting.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate status.

ECE 595 Independent Study 1-3(1-3-0)
As Needed.
Independent Study.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (99).

Economics (ECON)

ECON 101 Economics for Non-Business Majors 3(3-0)
As Needed.
ECON 101 is an online survey course covering both microeconomics and macroeconomics for Non-business major undergraduates. Topics will be studied through the lens of consumers, employees, business owners, and managers.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECON 201 Principles of Macroeconomics (GT-SS1) 3(3-0)
Fall, Spring.
Applications oriented approach to understanding the economy including monetary policy, deficits and surpluses, international issues; fundamental differences between liberal and conservative economic policies.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: SS, GT-SS1)

ECON 202 Principles of Microeconomics (GT-SS1) 3(3-0)
Fall, Spring, Summer.
Illustrates how firms make price, wage and profit maximizing decisions. Other topics include market performance, market failure, environmental issues and government intervention.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: SS, GT-SS1)

ECON 291 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECON 301 Intermediate Macroeconomics 3(3-0)
Fall.
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.
Corequisite: None.
Registration Information: None.

ECON 302 Intermediate Microeconomics 3(3-0)
Spring.
In-depth study of microeconomic theories of production and consumption. Emphasis on strategic behavior and decision making under uncertain conditions.
Prerequisite: ECON 202.
Corequisite: None.
Registration Information: None.

ECON 308 Economics For Managers 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

ECON 310 Money and Banking 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

ECON 320 Geography of the World Economy 3(3-0)
As Needed.
Students explore geographic dimensions of economic activities to better understand world regions, locational advantages, and geopolitical dynamics in an increasingly interconnected global economy.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ECON 325 Real Estate Economics 3(3-0)
Fall.
Explore the role of Real Estate in the U.S. economy. Examine the economic factors in the market, including property valuation, investment analysis methods, mortgage lending & investment strategies for wealth accumulation.
Prerequisite: ECON 201 and ECON 202.
Corequisite: None.
Registration Information: None.

ECON 420 Regional Economic Analysis 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

ECON 475 International Economics 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

ECON 490 Special Projects (1-6 V)
As Needed.
Special Projects.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

ECON 491 Special Topics (1-3 V)
As Needed.
Special Projects.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

ECON 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Must be HSB major. Permission of department chair. Repeatable (6).

ECON 498 Internship (1-6 V)
As Needed.
Supervised field work in selected business, social, and governmental organizations; supplemented by written reports.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Must be HSB major. Permission of internship coordinator. Repeatable (6).

ECON 501 Fundamentals of Economics 1.5(1.5-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

ECON 505 Principles of Microeconomics 3(3-0)
As Needed.
Applications oriented approach to understanding the economy including monetary policy, deficits and surpluses, international issues; fundamental differences between liberal and conservative economic policies.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

ECON 510 Economics for Managers 3(3-0)
Spring, Summer.
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: ECON 202.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

ECON 591 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.
Repeatable (6).

ECON 595 Independent Study (1-3 V)
As Needed.
Individual study of a subject determined by the instructor and student with permission of the director.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.
Repeatable (6).

Education (ED)

A grade of C or better is required for prerequisite courses.

ED 102 Teaching as a Career 1(1-1)
As Needed.
Orientation to teaching and teacher education. Not required for teacher certification.
Prerequisites: None.
Corequisites: None.
Registration Information: Class sessions and classroom observation required.

ED 202 Foundations of Education 3(3-0)
Fall, Spring, Summer.
Historical, philosophical and sociological dimensions of education including legal and financial challenges associated with the institution of education. 30 hours field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 280 Educational Media and Technology 3(3-0)
Fall, Spring, Summer.
Prepares teachers to use technology for instruction, assessment, management, and research.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

ED 294 Field Experience (1-12 V)
As Needed.
Field experience in an educational setting.
Prerequisite: None.
Corequisite: None.
Registration Information: Not applicable to teacher certification.

ED 301 Frameworks of Teaching 4(4-0)
Fall, Spring, Summer.
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: None.
Corequisites: None.
Registration Information: Completion of 45 credit hours and 2.6 cumulative GPA.

ED 351 Children's Literature 3(3-0)
Fall, Summer.
Classic and contemporary children's literature with emphasis on selection and evaluation.
Prerequisite: ENG 102.
Corequisite: None.
Registration Information: Repeatable (99).

ED 380 Integrated Methods in Elementary 3(3-0)
Fall, Summer.
Prepares elementary teachers to integrate the expressive arts and physical education into the elementary curriculum. 30 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 400 Workshop (1-3 V)
As Needed.
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: None.
Corequisite: None.
Registration Information: Repeatable (99).

ED 406 Behavioral Support 3(3-0)
Summer.
Prepares teachers to implement individual, classroom-wide and school-wide behavioral supports and interventions. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 407 Levels of Support I 3(3-0)
Spring.
Prepares teachers to teach students with special needs in inclusive environments, with emphasis on literacy, math, and academic interventions. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 408 Levels Of Support II 3(3-0)
Fall.
Addresses effective instruction for secondary students, including transition planning. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Beginning reading course strongly recommended as a prerequisite. Admission to School of Education.

ED 409 Levels Of Support III 3(3-0)
Summer.
Focuses on instructional programs for K-12 students with severe learning and behavioral challenges. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 410 Collaboration in Education 3(3-0)
Summer.
Supports skills at co-teaching, teaming, and collaboration with teachers, families, paraprofessionals, and others to strengthen student achievement. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 412 Teaching Diverse Learners 3(3-0)
Fall, Spring.
Focuses on legislation for special education, nature of exceptionalities, and meeting the needs of K-12 students, including second language learners. 30 hours field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 413 Teaching Elementary Social Studies 2(2-0)
Fall, Spring, Summer.
Methods of teaching social studies in the elementary school.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 414 Teaching Elementary Science & Health 2(2-0)
Fall, Spring.
Methods of teaching health and science in the elementary school; 30 hours of field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 417 Teaching Mathematics in Elementary School 2(2-0)
As Needed.
Scope and sequence of elementary school mathematics are examined along with instructional methods that address the developmental differences of children. 30 hours of field experience.
Prerequisite: MATH 361.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 421 Classroom Integration of Internet 2(2-0)
As Needed.
Methods to effectively and legally integrate the Internet into the classroom as a communication and instructional tool.
Prerequisite: ED 280.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 423 Teaching and Managing Technology 3(3-0)
As Needed.
Strategies, processes, and procedures for managing technology in K-12, including efficient use of emerging pedagogies.
Prerequisite: ED 280.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 427 Productivity Tools for Classroom 1(1-0)
As Needed.
Applications of Microsoft Office as a productivity tool, including integration of use in classroom. Field experience required.
Prerequisite: ED 280.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 428 Integration of Educational Software 1(1-0)
As Needed.
Familiarity with and criteria for selecting evaluating, and using quality educational software. Field experience required.
Prerequisite: ED 280.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 429 Literacy & Technology 3(3-0)
Summer.
Methods for using technology to assess and teach literacy.
Prerequisite: ED 280.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 431 Diverse Learners & Technology 3(3-0)
Summer.
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.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 432 Hardware & Networking for Educators 3(3-0)
As Needed.
Pedagogical and practical considerations in using networking and hardware in schools.
Prerequisite: ED 280.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 433 Instructional Theory & Tech Design 3(3-0)
As Needed.
Instructional system design theories and models and their adaptation to plan and use technology effectively in the classroom. Field experience required.
Prerequisite: ED 280.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 434 Multimedia Design 3(3-0)
Summer.
Methods and tools for creating multimedia learning objects for K-12 classrooms. Field experience required.
Prerequisite: ED 280.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 435 Classroom Management 3(2-3)
As Needed.
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: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 436 Technology & Assessment Tools 3(3-0)
As Needed.
Prepares teachers to use technology in assessment practices in the classroom.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 444 Teaching Secondary Science 4(3-2)
Fall.
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: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 445 Assessment & Data Driven Instruction 3(3-0)
Fall.
Prepares teachers to select, administer, and interpret formal and informal assessments to improve instruction. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 446 Teaching K-12 Art 4(3-2)
Fall.
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: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 447 Teaching English in Secondary Schools 4(3-2)
Fall.
Familiarizes students with Colorado foreign language standards, standards-based lesson and unit planning, and authentic assessment. 60 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 448 Teaching Foreign Language (K-12) 4(0-12)
Fall.
Familiarizes students with Colorado foreign language standards, standards-based lesson and unit planning, and authentic assessment. 60 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 451 Teaching Secondary Social Studies 4(3-2)
Fall.
Familiarizes students with the Colorado content standards, including standards-based lesson and unit planning strategies and authentic assessment. 60 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 452 Teaching Secondary Business 4(3-2)
As Needed.
Prepares teachers to teach all areas of the business curriculum in secondary schools. 60 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 481 Practicum & Seminar in Education (3-6 V)
As Needed.
Supervised practicum and seminar in second teaching or endorsement area.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education. Repeatable (99).

ED 485 Capstone Seminar in Education 1(1-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: None.

ED 487 Student Teaching Elementary (6-12 V)
As Needed.
Student teaching at the elementary level.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 488 Student Teaching Secondary (6-12 V)
As Needed.
Student teaching at the secondary level.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 489 Student Teaching K-12 (6-12 V)
As Needed.
Student teaching at the K-12 level.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ED 494 Field Experience (1-12 V)
As Needed.
Field experience in an educational setting. Not required for Teacher Certification.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (120).

ED 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ED 500 Professional Development for Teachers 0.5-3(0.5-3-0)
As Needed.
Professional development for teachers. Each has a subtitle describing the specific content. Does not count for M.Ed. credit.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ED 501 Graduate Topics in Education (0.5-3 V)
Fall, Spring, Summer.
Graduate topics in education. Each has a subtitle; no subtitle may be repeated for credit.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Counts for M.Ed. credit with approval of Program Director. Repeatable (99).

ED 502 Teacher As Change Agent 3(3-0)
Fall, Spring.
Introduces strategies for professional growth including interpretation of research and professional collaboration.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to M.Ed. Program and a teaching license or eligibility for teaching license.

ED 503 Teacher as Researcher 3(3-0)
Fall, Spring.
Develops skills at conducting and applying action research strategies to improve teaching and learning.
Prerequisite: ED 502.
Corequisite: None.
Registration Information: Admission to M.Ed. program.

ED 504 Leading Change in America's Schools 3(3-0)
Fall, Spring.
Builds teachers' skills in leading school change.
Prerequisite: ED 502.
Corequisite: None.
Registration Information: Admission to M.Ed. program.

ED 506 Behavioral Support 3(3-0)
Summer.
Prepares teachers to implement individual, classroom-wide and school-wide behavioral supports and interventions. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 507 Levels of Support I 3(3-0)
Spring.
Prepares teachers to teach students with special needs in inclusive environments, with emphasis on literacy, math, and academic interventions. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 508 Levels of Support II 3(3-0)
Fall.
Addresses effective instruction for secondary students, including transition planning. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 509 Levels of Support III 3(3-0)
Summer.
Focuses on instructional programs for K-12 students with severe learning and behavioral challenges. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 510 Collaboration in Education 3(3-0)
Summer.
Supports skills at co-teaching, teaming, and collaboration with teachers, families, paraprofessionals, and others to strengthen student achievement. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 512 Teaching Diverse Learners 3(3-0)
Fall, Spring, Summer.
Focuses on legislation for special education, nature of exceptionalities, and meeting the needs of K-12 students, including second language learners; 30 hours field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 514 Teaching K-6 Math 2(2-0)
Fall, Spring.
Focuses on teaching methods, materials, and assessment strategies in math in the elementary school; 30 hours of field experiences.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 520 Educational Media and Technology 3(3-0)
Fall, Spring, Summer.
Prepares teachers to use technology for instruction, assessment, management, and research.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 521 Classroom Integration of Internet 2(2-0)
As Needed.
Methods to effectively and legally integrate the Internet into the classroom as a communication and instructional tool.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 523 Teaching & Managing Technology 3(3-0)
As Needed.
Strategies, processes, and procedures for managing technology in K-12, including efficient use of emerging pedagogies.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 524 Advanced Techniques of Teaching Elementary Social 2(2-0)
Fall, Spring, Summer.
Analysis of techniques for conceptual approaches to teaching socialization skills, critical thinking, and inquiry skills; helping children develop healthy attitudes and values.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 525 Advanced Techniques of Teaching Elementary Science 2(2-0)
Fall, Spring.
Emphasis on the newest concepts, techniques and materials for teaching elementary school science and health.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 527 Productivity Tools for Classroom 1(1-0)
As Needed.
Applications of Microsoft Office as a productivity tool, including integration of use in classroom. Field experience required.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 528 Integration of Educational Software 1(1-0)
As Needed.
Familiarity with and criteria for selecting evaluating, and using quality educational software. Field experience required.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 529 Literacy & Technology 3(3-0)
Summer.
Methods for using technology to assess and teach literacy. Field experience required.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 531 Diverse Learners & Technology 3(3-0)
Summer.
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 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 532 Hardware & Networking for Educators 3(3-0)
As Needed.
Pedagogical and practical considerations in using networking and hardware in schools.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 533 Instructional Theory & Tech Design 3(3-0)
As Needed.
Instructional system design theories and models and their adaptation to plan and use technology effectively in the classroom. Field experience required.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 534 Multimedia Design 3(3-0)
Summer.
Methods and tools for creating multimedia learning objects for K-12 classrooms. Field experience required.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 536 Technology & Assessment Tools 3(3-0)
As Needed.
Prepares teachers to use technology in assessment practices in the classroom.
Prerequisite: ED 280 or ED 520.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 540 Foundations of American Education 3(3-0)
As Needed.
A foundational investigation into the historical, philosophical, and sociological dimensions of education in the United States, including advocacy, legislation, leaders and structures, and finance.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 542 Contemporary Techniques of Classroom Management 2(2-0)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

ED 543 Teaching K-12 Health 3(3-0)
As Needed.
Focuses on teaching methods, using appropriate materials and strategies, as well as creating assessments, necessary to prepare students to teach in K-12, standards-based, health classrooms.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 544 Teaching Secondary Science 3(3-0)
Fall.
Focuses on teaching methods, materials, and assessment strategies necessary to prepare students to teach in secondary standards-based science classrooms.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 545 Assessment & Data Driven Instruction 3(3-0)
Fall.
Prepares teachers to select, administer, and interpret formal and informal assessments to improve instruction. Field experience required.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 546 Teaching K-12 Art 3(3-0)
Fall.
Focuses on Art curriculum, methods, and assessment to prepare art educators to successfully teach in K-12 standards-based art classrooms.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 547 Teaching English in Secondary Schools (3 V)
Fall.
Familiarizes students with Colorado Language Arts Standards, standards-based lesson, and unit planning and authentic assessment.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 548 Teaching Foreign Language 3(3-0)
Fall.
Familiarizes students with Colorado Foreign Language Standards, standards-based lesson and unit planning and authentic assessment.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 550 K-12 Music Methods 3(3-0)
Fall.
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: None.
Corequisite: None.
Registration Information: Graduate standing.

ED 551 Teaching Secondary Social Studies 3(3-0)
Fall.
Familiarizes students with Colorado Social Studies Content Standards, standards-based lesson and unit planning strategies and authentic assessment.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 552 Teaching Secondary Business 3(3-0)
As Needed.
Prepares teachers to teach all areas of the business curriculum in secondary schools.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 560 Professional Develop in Curriculum & Instruction 4(4-0)
Fall, Spring, Summer.
Stresses skill-building in classroom instruction, including curriculum development and student assessment. Current innovations in public education are also addressed.
Prerequisite: None.
Corequisite: None.
Registration Information: Completion of 45 credit hours and 2.6 cumulative GPA.

ED 565 Introduction to Educational Statistics 1(1-0)
As Needed.
Statistical methods in education; graphs, charts, frequency distributions, central tendencies, dispersion, correlation, sampling errors, estimation, and hypothesis testing.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 570 The Technology Coordinator 3(3-0)
As Needed.
Examination of the roles of the technology coordinator in a K-12 educational setting.
Prerequisite: ED 280 or ED 522.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 571 Distance Learning 3(3-0)
As Needed.
Provides information needed to be knowledgeable distance educators and instructional developers for K-12 distance learners.
Prerequisite: ED 280 or ED 522.
Corequisite: None.
Registration Information: None.

ED 574 Early Childhood Space Exploration 3(3-0)
As Needed.
Designed to provide tools necessary to teach space concepts through inquiry-based learning to young children.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 575 Lunar/Mars Exploration 3(3-0)
As Needed.
Participants will investigate how to establish and maintain humans on our moon or Mars and how to integrate these concepts into the classroom.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 576 Rocketry & Exploration 3(3-0)
As Needed.
Participants will examine the technological advances that are being developed for human exploration of the solar system.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 577 Astronomy for the Classroom 3(3-0)
As Needed.
Participants will investigate topics such as motions of the heavens, astronomical research tools, stars, and constellations, 3D exploration of comets, auroras, and planets.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 578 Long Term Space Travel 3(3-0)
As Needed.
Participants will investigate answers to how humans can expand beyond home to maximize the benefits from space exploration.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 579 Earth Systems Science 3(3-0)
As Needed.
Participants will investigate answers to how humans can expand beyond home to maximize the benefits from space exploration.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 580 Integrated Methods 3(3-0)
Fall, Spring.
Prepares elementary teachers to teach Social Studies, with emphasis on integration of the expressive arts and PE.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education.

ED 581 Practicum & Seminar in Education (1-6 V)
Fall, Spring, Summer.
Supervised practicum and seminar in special education.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education. Repeatable (99).

ED 591 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

ED 592 Research (1-3 V)
As Needed.
Research.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of program director. Repeatable (99).

ED 593 Seminar (1-6 V)
Fall, Spring, Summer.
Seminar.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to School of Education. Repeatable (99).

ED 594 Field Experience (1-12 V)
As Needed.
Field experience in an educational setting.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

ED 595 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

ED 599 Thesis Research (1-6 V)
As Needed.
Thesis Research.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of program Director. Repeatable (99).

ED 600 Introduction to Educational Leadership 3(3-0)
As Needed.
Introduces effective leadership and management to include current issues and trends facing today's educational leaders, ethics and professionalism, with an emphasis on the CO Principal Quality Standards.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ED 601 Shaping Organizations: Leadership & Management 3(3-0)
As Needed.
Explores qualities of effective change agency to include organizational behaviors, communication skills, goal setting, aligned planning, change theory, and skill development within complex educational organizations.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 602 Legal & Financial Dimensions of School Leadership 3(3-0)
As Needed.
Examines national, state, and local laws and policies that affect organization and administration of school systems including, but not limited to: IDEA, CO READ Act, budgeting and financial decision making.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ED 603 External Environments in Leadership 3(3-0)
As Needed.
External influences on leadership decisions including political climate, demographics, economic trends, family engagement, community support systems, school safety, and accountability measures.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 604 Educator Development, Supervision, & Evaluation 3(3-0)
As Needed.
Curriculum development, instructional strategies, effective coaching and mentoring, and developing the capacity of instructors to improve their own effectiveness; all for improved student outcomes.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 605 The Principalship: Leadership at the Site Level 3(3-0)
As Needed.
School site-level management and leadership issues faced by building principals such as: personnel, site-based budgeting, curriculum and instruction, student/staff/parent engagement, safety, and day-to-day management.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 606 Technology & Site-Level, Data-Driven Decisions 3(3-0)
As Needed.
Strategies involved with the examination of a wide variety of assessment data to identify strengths and deficiencies in the teaching/learning process and the application of findings to ongoing policy and practice.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 610 Gifted Learner Development 3(3-0)
As Needed.
Explores the development, nature, and needs of gifted learners, including twice exceptional learners, gifted learners in underrepresented populations, and other dimensions of giftedness.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 611 Learning Environments for Gifted Learners 3(3-0)
As Needed.
Provides educators with the ability to create effective learning environments for gifted learners. It also explores other structures to help gifted learners thrive.
Prerequisites: None.
Corequisites: None.
Registration Information: This course can be used to meet the M.Ed. Pedagogy Requirement for Differentiation of Instruction.

ED 612 Instructional Strategies for Gifted Learners 3(3-0)
As Needed.
Provides educators with the ability to select, adapt, and use a repertoire of evidence-based instructional strategies, including technology, to advance the learning of gifted learners.
Prerequisites: None.
Corequisites: None.
Registration Information: This course can be used to meet the M.Ed. Pedagogy Requirement for Instructional Technology.

ED 613 Curriculum for Gifted Learners 3(3-0)
As Needed.
Provides educators with the skills to evaluate, create, and implement curricula for gifted learners.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ED 614 Assessment & Evaluation in Gifted Education 3(3-0)
As Needed.
Addresses best practices in the identification processes for gifted learners and the assessment and evaluation of both individual learners and gifted programs.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ED 615 Foundations & Ethics in Gifted Education 3(3-0)
As Needed.
Analyzes the historical, philosophical, psychological, and contextual foundations of gifted education and promotes the ethical principles of dealing with gifted learners.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ED 616 Collaboration & Communication in Gifted Education 3(3-0)
As Needed.
Supports skill development with collaboration, communication, and leadership in gifted education.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ED 681 Practicum in Gifted Education 3(0.5-7.5)
As Needed.
Candidates engage in onsite educational activities related to gifted education to develop program standards. Placements will be determined by program advisor and school district/building leadership.
Prerequisites: None.
Corequisites: None.
Registration Information: Should be taken during the final term of the Gifted Education program. Repeatable (15).

ED 698 Internship in Educational Leadership 1-12(1-12-0)
As Needed.
Candidates engage in onsite educational activities throughout their program to develop program standards. Placements will be determined by program advisor and school district/building leadership.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 701 Doctoral-Level Topics in Education (0.5-3 V)
As Needed.
Doctoral-level topics in education. Each has a subtitle; no subtitle may be repeated for credit. Counts for Ed.D. credit with approval of Program Director.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ED 710 Contemporary Theories in Leadership 3(3-0)
As Needed.
Explores the nature of complex organizations and various theories of organizational leadership focusing on inquiry and reflective practice.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 711 Issues in Educational Leadership 3(3-0)
As Needed.
Examination of current national, state, and local educational climate including government policies and spending, technology, achievement, school reform, social-emotional needs, diversity, and equity.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 712 Ethics in Educational Leadership 3(3-0)
As Needed.
The study of complex organizations and the nature of leadership with an emphasis on moral and ethical decision-making.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 713 Strategic Change in Education 3(3-0)
As Needed.
Exploration of ways to assess, select, and implement effective organizational changes/initiatives that affect health and safety, equal access, professional development, teaching and learning, & student achievement.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 714 Policy Analysis & Advocacy for Change 3(3-0)
As Needed.
Necessary tools for the design, planning, implementation, and assessment of current or proposed policy including best practices for advocacy at appropriate levels.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 715 Developing Organizational Culture 3(3-0)
As Needed.
Study of how leaders influence the culture of their organizations and best strategies to change the current culture, bringing about positive environments for students, staff, families, and other stakeholders.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 716 Advanced Inquiry & Analysis in Education 3(3-0)
As Needed.
Focus on bringing strategies and tools to educational leaders to engage and guide group inquiry and collaboration to bring about positive change with an emphasis on a continual cycle of assessment and review.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 717 Distributed Leadership & Organizational Structures 3(3-0)
As Needed.
Explores the best practices of implementing distributed leadership and how it interacts with various organizational structures.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 720 Quantitative Research in Education 3(3-0)
As Needed.
Quantitative research methods in education including fundamental principles of scientific research emphasizing research designs, measurement, sampling, ethics, and quantitative writing methods.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 721 Qualitative Research in Education 3(3-0)
As Needed.
Qualitative research methods in education including the process involved with data collection, description, analysis, and interpretation emphasizing quality criteria, solid research practice, ethics, and writing methods.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 722 Data-Driven Leadership 3(3-0)
As Needed.
How to lead the purposeful application of quantitative and qualitative research methods to analyze data in an educational context and make data-driven decisions.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 730 Contracts & Negotiation 3(3-0)
As Needed.
Negotiation strategies with emphasis on educational professionals, focusing on positive conflict resolution, interest-based bargaining, and contract law.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 731 Economics of Human Resources 3(3-0)
As Needed.
Explores the roles & responsibilities of the human resources manager in educational systems. Includes planning, recruiting, hiring, development, and compensation; while operating within negotiated agreements and policies.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 732 Advanced Law & Administration 3(3-0)
As Needed.
Explores legal issues specific to school leaders with emphasis on school environment, constitutional issues, students, personnel, and accountability.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ED 733 Leaders in Literacy 3(3-0)
As Needed.
Explores the issues and experiences of literacy supervision and leadership in educational environments. Students will gain knowledge and understanding of acquisition, assessment, and instruction of literacy practices.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to Ed.D. program required.

ED 734 Global Perspectives on Education 3(3-0)
As Needed.
An examination of different educational systems in countries around the world. Explores the history, the policies, the pedagogy, and the leadership practices from educational systems in different countries including the U.S.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to Ed.D. program required.

ED 735 The Epistemology of Leadership 3(3-0)
As Needed.
An examination of the epistemology of leadership on the basis of its history, sociogenesis and psychology.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to Ed.D. program required.

ED 736 Technology Leadership in K-20 Contexts 3(3-0)
As Needed.
Equips practitioners with the knowledge, skills, and strategies needed to lead and innovate in educational technology. Topics include the intersection of pedagogy and technology and how to leverage digital tools.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to Ed.D. program required.

ED 737 Teacher Leader 3(3-0)
As Needed.
Focuses on the realization that teacher leadership is essential, examine how to recruit then grow leaders, and how to provide growth opportunities for teacher leaders through empowerment and ongoing professional growth.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to Ed.D. program required.

ED 738 Researching & Writing a Critical Literature Review 3(3-0)
As Needed.
This course will cover the process of writing a critical literature review of scholarly sources including key findings and concepts and developments in relation to a research topic and problem of practice.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to Ed.D. program required.

ED 791 Special Topics 1-3(1-3-0)
As Needed.
Doctoral-level special topics in education. Each has a subtitle; no subtitle may be repeated for credit. Counts for Ed.D. credit with approval of Program Director.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to Ed.D. Program Required. Repeatable (99).

ED 895 Independent Study 1-3(1-3-0)
As Needed.
Doctoral-level independent study in education. Counts for Ed.D. credit with approval of Program Director.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to Ed.D. Program Required. Repeatable (99).

ED 898 Doctoral Practicum in Educational Leadership (1-12 V)
As Needed.
Practicum in an appropriate educational placement to develop skills related to Ed.D. program standards, linking theory and practice. Placements will be approved by doctoral advisor.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (24).

ED 899 Dissertation Research (1-12 V)
As Needed.
Dissertation research leading up to and including completion of the approved doctoral dissertation.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (24).

Engineering (EN)

EN 101 Introduction to Engineering 2(2-0)
Fall, Spring.
Introduction to engineering curriculum and careers. Problem solving and creativity. Spreadsheets, word processing and other computer skills.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EN 103 Problem Solving for Engineers 3(2-2)
Fall, Spring.
Writing computer programs to solve real-world problems in engineering and science.
Prerequisite: MATH 120.
Corequisite: None.
Registration Information: None.

EN 107 Engineering Graphics 2(1-2)
Fall, Spring.
Introduction to the preparation of engineering drawings using freehand sketching and computer graphics software.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EN 109 Introduction to Sustainability 2(2-0)
Fall.
Interdisciplinary foundation for sustainability including systems theory, humans and the environments, and the social and economic dimensions of sustainability.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EN 211 Engineering Mechanics I 3(3-0)
Fall.
Introduction to the relationship between forces and moments acting on an object that is in equilibrium (statics).
Prerequisite: MATH 207 and PHYS 221.
Corequisite: None.
Registration Information: None.

EN 212 Engineering Mechanics II 3(3-0)
Spring.
Introduction to the relationship between forces and moments acting on rigid objects and the motion of objects (dynamics).
Prerequisite: EN 211.
Corequisite: None.
Registration Information: None.

EN 215 Introduction to Industrial and Systems Engineering 3(3-0)
Fall.
Engineering viewpoints of the principles of organization for production and the operations applicable to accomplishing organizational responsibilities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EN 231 Circuit Analysis I 4(4-0)
Fall.
Circuit concepts, conventions and network equations. Initial conditions and classical methods of obtaining transient and steady-state solutions.
Prerequisite: EN 231L and MATH 207 and PHYS 222.
Corequisite: None.
Registration Information: None.

EN 231L Circuit Analysis I Lab 1(0-2)
Fall.
Observation and analysis of electrical circuits involving resistance, inductance and capacitance.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 231 strongly recommended as corequisite.

EN 232 Circuit Analysis II 4(4-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

EN 260 Basic Electronics 3(3-0)
Spring.
Characteristics, operation, and basic circuits of solid-state devices. Operational amplifiers with typical applications are also introduced.
Prerequisite: EN 231.
Corequisite: None.
Registration Information: None.

EN 263 Electromechanical Devices 3(3-0)
As Needed.
DC and AC motors and generators, transformers, stepper motors, servomotors and various sensors: theory, device characteristics, applications and controls.
Prerequisite: EN 103 and EN 212 and EN 231 and EN 260.
Corequisite: None.
Registration Information: None.

EN 275 Stochastic Systems 4(4-0)
Fall.
Noncalculus probability modeling and statistical analysis of systems containing elements of uncertainty.
Prerequisite: MATH 101.
Corequisite: None.
Registration Information: None.

EN 286 Group Dynamics for Teams 3(3-0)
Spring.
Group Dynamics applied to teams. Team development, basic team processes, conflict management, decision making, leadership, problem solving, and impacts of diversity and culture on teams.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EN 291 Special Topics (1-5 V)
As Needed.
Selected topics in engineering.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

EN 292 Research (1-6 V)
As Needed.
Research closely supervised by a faculty member with regular meetings.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

EN 295 Independent Study (1-5 V)
As Needed.
Intensive study directed by a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

EN 296 Cooperative Education Placement (1-5 V)
Fall, Spring.
Work experience under direction of a field supervisor and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Freshman or sophomore standing. Repeatable (99).

EN 298 Internship (1-6 V)
As Needed.
Field work in a company or organization, with written reports.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

EN 301 Fluid Mechanics 4(4-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

EN 321 Thermodynamics 3(3-0)
Fall.
Introduction to energy equations and flows, entropy, kinetic theory and statistical mechanics, second law of thermodynamics, heat engines and heat transfer.
Prerequisite: PHYS 221.
Corequisite: None.
Registration Information: None.

EN 324 Materials Science and Engineering 3(3-0)
Spring.
Fundamentals of chemical structure and atomic bonding, material properties, deformations under force, stress-strain relationships, selection of materials.
Prerequisite: PHYS 221.
Corequisite: None.
Registration Information: High school chemistry required as prerequisite. EN 324L strongly recommended as corequisite.

EN 324L Materials Science and Engineering Lab 1(0-2)
Spring.
Measurements of material properties and stress-strain relationships.
Prerequisite: EN 211.
Corequisite: None.
Registration Information: EN 324 strongly recommended as corequisite.

EN 343 Engineering Economy 3(3-0)
Fall.
Modeling, analysis and decision making involving time value of money, depreciation, income taxes and replacement analysis.
Prerequisite: MATH 120.
Corequisite: None.
Registration Information: None.

EN 351 Heat Transfer 3(3-0)
As Needed.
Steady and unsteady conduction of heat. Convection heat transfer in boundary layer and duct flows. Forced and free convection. Thermal radiation.
Prerequisite: EN 321.
Corequisite: None.
Registration Information: None.

EN 360 Control Systems I 2(2-0)
As Needed.
Linear analog control systems theory is introduced. Open and closed-loop systems are examined, and performance characteristics are analyzed.
Prerequisite: EN 260 and MATH 337.
Corequisite: None.
Registration Information: EN 360L strongly recommended as corequisite.

EN 360L Control Systems I Lab 1(0-2)
Fall.
Control Systems I Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 360 strongly recommended as corequisite.

EN 361 Digital Electronics 3(3-0)
Spring.
Introduction to digital technology emphasizing practical microprocessors. Number systems and codes, truth tables, Boolean functions, combinational and sequential logic, registers, counters, memory devices & microprocessors.
Prerequisite: EN 260.
Corequisite: None.
Registration Information: EN 361L strongly recommended as corequisite.

EN 361L Digital Electronics Lab 1(0-2)
Spring.
Digital Electronics Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 361 strongly recommended as corequisite.

EN 362 Introduction to Mechatronics 2(2-0)
Fall.
Elements of a mechatronics system: signal conditioning, sensors, actuators, microcontrollers, and software.
Prerequisite: EN 263.
Corequisite: None.
Registration Information: EN 362L strongly recommended as corequisite.

EN 362L Mechatronics Lab 1(0-2)
Fall.
Mechatronics Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 362 strongly recommended as corequisite.

EN 363 Virtual Machine Design 2(2-0)
Spring.
Computer aided design of machines including mechanical components: shaft systems, power transmission, and motion generation.
Prerequisite: EN 324.
Corequisite: None.
Registration Information: EN 363L strongly recommended as corequisite.

EN 363L Virtual Machine Design Lab 1(0-2)
Spring.
Virtual Machine Design Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 363 strongly recommended as corequisite.

EN 375 Stochastic Systems Engineering 3(3-0)
Fall.
Probability modeling and statistical analysis of engineering systems containing elements of uncertainty.
Prerequisite: MATH 126.
Corequisite: None.
Registration Information: None.

EN 405 Advanced Programming 3(3-0)
As Needed.
Crafting efficient computer programs to solve large-scale engineering problems. Object oriented programming, data structures and algorithms, algorithmic complexity analysis.
Prerequisite: EN 103.
Corequisite: None.
Registration Information: May take equivalent of EN 103.

EN 420 Simulation Experiments 4(3-2)
Spring.
Design and statistical analysis of experiments using discrete event simulation models.
Prerequisite: EN 375.
Corequisite: None.
Registration Information: None.

EN 430 Project Planning and Control 3(3-0)
Fall.
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 375.
Corequisite: None.
Registration Information: None.

EN 435 Microprocessor Control Systems 3(2-2)
As Needed.
Components of a microprocessor control system, digital processing, survey of state-of-the-art micro-processor control systems.
Prerequisite: EN 360.
Corequisite: None.
Registration Information: None.

EN 439 Time and Motion Studies 2(1-2)
Fall.
Principles and techniques of methods analysis and work measurement, human performance in human-machine systems.
Prerequisite: EN 215 and EN 375.
Corequisite: None.
Registration Information: None.

EN 440 Safety Engineering 3(3-0)
Spring.
Occupational safety & health in different industrial environments. Theories of accident causation, government regulation, hazards, equipment, & safety administration.
Prerequisite: EN 343 and EN 439.
Corequisite: None.
Registration Information: None.

EN 441 Engineering of Manufacturing Processes 3(3-0)
Spring.
Materials and processes for manufacturing including machining, casting, and forming processes: design, modeling and control.
Prerequisite: EN 212.
Corequisite: None.
Registration Information: EN 441L strongly recommended as corequisite.

EN 441L Engineering & Manufacturing Proc Lab 1(0-2)
Spring.
Engineering & Manufacturing Proc Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 441 strongly recommended as corequisite.

EN 442 Manufacturing Processes II 3(3-0)
As Needed.
Materials and processes for manufacturing including sheet metal forming, welding, machining and advanced manufacturing processes.
Prerequisite: EN 342.
Corequisite: None.
Registration Information: None.

EN 443 Quality Control and Reliability 3(3-0)
Spring.
Principles/methods of quality control/improvement. Quality management: design & implementation, problem solving techniques, quality improvement tools, etc. Statistical quality control: charts, evaluation, sampling, etc.
Prerequisite: EN 275 or EN 375.
Corequisite: None.
Registration Information: None.

EN 460 Control Systems II 2(2-0)
Spring.
Advanced control systems analysis, including microprocessor-based control systems analysis, A/D and D/A converters, Z transforms, and stepper motors.
Prerequisite: EN 360.
Corequisite: None.
Registration Information: EN 460L strongly recommended as corequisite.

EN 460L Control Systems II Lab 1(0-2)
Spring.
Control Systems II Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 460 strongly recommended as corequisite.

EN 462 Industrial Robotics 2(2-0)
Spring.
Basic robotics principles; robot interfacing; robot controls and programming. Laboratory exercises use various robots to meet specific industrial tasks.
Prerequisite: EN 460 and EN 473.
Corequisite: None.
Registration Information: EN 462L strongly recommended as corequisite.

EN 462L Industrial Robotics Lab 1(0-2)
Spring.
Industrial Robotics Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 462 strongly recommended as corequisite.

EN 471 Operations Research 3(3-0)
Fall.
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 and MATH 224.
Corequisite: None.
Registration Information: None.

EN 473 Computer Integrated Manufacturing 2(2-0)
Fall.
Engineering design, modeling and applications in production: automation, flowlines, robotics, numerical control, and computer usage in manufacturing.
Prerequisite: EN 103 and EN 231 and EN 231L and EN 441 and MATH 207.
Corequisite: None.
Registration Information: EN 473L strongly recommended as corequisite.

EN 473L Computer Integrated Mfg Lab 1(0-2)
Fall.
Computer Integrated Mfg Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 473 strongly recommended as corequisite.

EN 475 Facility Planning and Design 3(3-0)
Fall.
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.
Prerequisite: EN 439 and EN 471.
Corequisite: None.
Registration Information: None.

EN 477 Operations Planning and Control 3(3-0)
Spring.
Techniques for analysis and management of manufacturing operations and production with emphasis on inventory systems and forecasting.
Prerequisite: EN 471.
Corequisite: None.
Registration Information: None.

EN 486 Senior Seminar 2(2-0)
Fall.
Steps in the engineering design process including creativity, technical analysis, and presentations. Prepare for senior project.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

EN 487 Engineering Design 3(3-0)
Spring.
Application of engineering principles to a design project.
Prerequisite: EN 486.
Corequisite: None.
Registration Information: None.

EN 488 Industrial Engineering Design 3(3-0)
Spring.
Application of engineering principles to a design project.
Prerequisite: EN 486.
Corequisite: None.
Registration Information: None.

EN 489 Senior Capstone in Sustainability 1(1-0)
Spring.
Application of knowledge gained in the sustainability minor to a project in sustainability.
Prerequisite: CHEM 125 and EN 109.
Corequisite: None.
Registration Information: None.

EN 491 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing. Repeatable (99).

EN 492 Research (1-6 V)
As Needed.
Faculty directed research project.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Repeatable (99).

EN 495 Independent Study (1-5 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing. Repeatable (99).

EN 496 Cooperative Education Placement (1-5 V)
Fall, Spring.
Work experience under the direction of a field supervisor and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Repeatable (99).

EN 498 Internship (1-6 V)
As Needed.
Field work in a company or organization, with written reports.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Repeatable (99).

EN 503 Ergonomics 3(3-0)
Spring.
Theory/practice of human performance measurement & factors engineering. Study of human sensory/perceptive/mental/psychomotor applied to the design of human-machine systems for performance/effectiveness/productivity/safety.
Prerequisite: EN 540.
Corequisite: None.
Registration Information: None.

EN 504 Scheduling and Sequencing 3(3-0)
Spring.
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.
Corequisite: None.
Registration Information: None.

EN 505 Advanced Programming 3(3-0)
As Needed.
Crafting efficient computer programs to solve large-scale engineering problems. Object oriented programming, data structures and algorithms, algorithmic complexity analysis.
Prerequisite: EN 103.
Corequisite: None.
Registration Information: May take equivalent of EN 103.

EN 507 Virtual Reality 3(3-0)
Fall.
Principles, practical aspects, and applications of virtual reality systems and components such as 3D interfaces, displays (3D, visual, haptic, auditory), position tracking, and virtual environments.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EN 511 Structural Engineering 3(3-0)
Fall.
Design and analysis of wood, steel and concrete structures in railroad application.
Prerequisite: EN 211 and EN 212.
Corequisite: None.
Registration Information: None.

EN 513 Artificial Intelligence 3(3-0)
Spring.
Topics in artificial intelligence including predicate calculus, search strategies, and machine learning with applications.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EN 520 Simulation Experiments 4(3-2)
Spring.
Design and statistical analysis of experiments using discrete event simulation models.
Prerequisite: EN 375.
Corequisite: None.
Registration Information: None.

EN 525 Modeling & Simulation 3(3-0)
As Needed.
Analysis and evaluation of real systems by using modern simulation methods such as System Dynamics and Multi-Agent-Based Modeling in engineering and business.
Prerequisite: BSAD 265 or EN 375.
Corequisite: None.
Registration Information: A college course on inferential statistics.

EN 528 Systems Theory & Applications 3(3-0)
As Needed.
A detailed description of different perspectives to analyze and understand the value of the systems perspective in addressing complex systems problems faced by managers in technology-based enterprises.
Prerequisite: MGMT 201.
Corequisite: None.
Registration Information: None.

EN 530 Project Planning and Control 3(3-0)
Spring.
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: None.
Corequisite: None.
Registration Information: None.

EN 531 Railroad Power Systems 3(3-0)
As Needed.
Comprehensive analysis and design of electric power systems for railroads including power supplies, AC/DC and linear motors, third rails, catenaries, and substations/distribution systems.
Prerequisite: EN 231 and EN 231L and EN 263 and EN 360.
Corequisite: None.
Registration Information: None.

EN 539 Time and Motion Studies 2(1-2)
Fall.
Principles and techniques of methods analysis and work measurement, human performance in human-machine systems. Introduction to research in selected topics.
Prerequisite: None.
Corequisite: EN 375.
Registration Information: None.

EN 540 Safety Engineering 3(3-0)
Spring.
Occupational safety and health. Theories of accident causation, governmental regulation, protective equipment, hazard analysis, safety programs design and administration. Introduction to research in selected topics.
Prerequisite: EN 375.
Corequisite: None.
Registration Information: None.

EN 541 Engineering of Manufacturing Processes 3(3-0)
Spring.
Materials and processes for manufacturing including machining, casting, and forming processes: design, modeling and control. Introduction to research in selected topics.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 541L strongly recommended as corequisite. Permission of instructor.

EN 541L Engineering & Manufacturing Proc Lab 1(0-2)
Spring.
Engineering & Manufacturing Proc Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 541 strongly recommended as corequisite.

EN 543 Quality Control and Reliability 3(3-0)
Spring.
Design and implementation of quality programs, quality improvement tools, control charts, process capability evaluation, acceptance sampling procedures. Introduction to research in selected topics.
Prerequisite: EN 275 or EN 375.
Corequisite: None.
Registration Information: None.

EN 544 Advanced Engineering Economics 3(3-0)
Spring.
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.
Corequisite: None.
Registration Information: Permission of instructor.

EN 551 Fleet Management 3(3-0)
As Needed.
Fleet management business and economics, risk analysis, information systems, vehicle planning and control, productivity, safety, and environmental compliance.
Prerequisite: EN 343 and EN 375 and EN 471 and EN 530 and EN 577.
Corequisite: None.
Registration Information: None.

EN 552 Vehicle Dynamics 3(3-0)
As Needed.
Fundamental dynamic considerations in designing ground vehicles and vehicle control systems. Rail systems as an example of modeling dynamic systems at various levels of abstraction.
Prerequisite: EN 211 and EN 212 and EN 231 and EN 263.
Corequisite: None.
Registration Information: None.

EN 556 (MATH 556) Design & Analysis of Experiments 3(3-0)
Summer.
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 MATH 356.
Corequisite: None.
Registration Information: None.

EN 560 Control Systems II 2(2-0)
Spring.
Advanced control systems analysis, including microprocessor-based control systems analysis, A/D and D/A convertors, Z transforms, and stepper motors. Introduction to research in selected topics.
Prerequisite: EN 360 and EN 361.
Corequisite: None.
Registration Information: EN 560L strongly recommended as corequisite.

EN 560L Control Systems II Lab 1(0-2)
Spring.
Control Systems II Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 560 strongly recommended as corequisite.

EN 561 Advanced Controls 3(3-0)
Fall.
State-spaced based analysis/design of linear control systems are introduced in both continuous- and discrete-time domains. Nonlinear systems and the linearization method are covered.
Prerequisite: EN 360.
Corequisite: None.
Registration Information: None.

EN 562 Industrial Robotics 2(2-0)
Spring.
Basic robotics principles; robot interfacing; robot controls and programming. Laboratory exercises use various robots to meet specific industrial tasks. Introduction to research in selected topics.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 562L strongly recommended as corequisite. Permission of instructor.

EN 562L Industrial Robotics Lab 1(0-2)
Spring.
Industrial Robotics Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 562 strongly recommended as corequisite.

EN 563 Intelligent Robotics 3(3-0)
Spring.
Theoretical and practical aspects of advanced robotic topics such as trajectory generation, path planning and control, decision logic, advanced sensors, autonomous mobile robots, and humanoids.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

EN 565 Stochastic Systems Engineering 3(3-0)
As Needed.
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 MATH 356.
Corequisite: None.
Registration Information: None.

EN 571 Operations Research 3(3-0)
Fall.
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.
Corequisite: None.
Registration Information: Graduate standing.

EN 573 Computer Integrated Manufacturing 2(2-0)
Fall.
Ingineering design, modeling and applications for production automation, flowlines, robotics, numerical control, and computer usage in manufacturing. Introduction to research in selected topics.
Prerequisite: EN 541.
Corequisite: None.
Registration Information: EN 573L strongly recommended as corequisite.

EN 573L Computer Integrated Mfg Lab 1(0-2)
Fall.
Computer Integrated Mfg Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: EN 573 strongly recommended as corequisite.

EN 575 Facilities Planning and Design 3(3-0)
Fall.
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.
Prerequisite: None.
Corequisite: EN 571.
Registration Information: None.

EN 577 Operations Planning and Control 3(3-0)
Spring.
Techniques for analysis and management of manufacturing operations and production with emphasis on inventory systems and forecasting.
Prerequisite: EN 571.
Corequisite: None.
Registration Information: Permission of instructor.

EN 578 Decision Making under Uncertainty 3(3-0)
As Needed.
A broad introduction to algorithms for decision making under uncertainty covering a wide variety of topics related to decision making, introducing the underlying mathematical problem formulations and their algorithms.
Prerequisites: BSAD 265 or EN 565.
Corequisites: None.
Registration Information: A college course on inferential statistics.

EN 585 Program Capstone 3(3-0)
As Needed.
Program Capstone for students finishing the Master in Engineering Management.
Prerequisite: None.
Corequisite: None.
Registration Information: 12 credit hours (Master in Engineering Management core courses) and graduate standing.

EN 588 Graduate Projects 3(3-0)
As Needed.
Application of graduate industrial engineering principles to a capstone design project.
Prerequisite: EN 520 and EN 571 and EN 575 and EN 577.
Corequisite: None.
Registration Information: Repeatable (99).

EN 590 Special Projects (1-3 V)
As Needed.
Individual project selected, outlined and pursued by student.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Approval of advisor. Repeatable (99).

EN 591 Special Topics (1-3 V)
Spring.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

EN 593 Graduate Seminar 2(2-0)
Fall.
Seminar for students entering the systems engineering program. Philosophical, methodological and ethical issues in systems engineering are discussed.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

EN 595 Independent Study (1-5 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

EN 598 Internship (1-6 V)
As Needed.
Field work in a company or organization, with written reports.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

EN 599 Thesis Research (1-9 V)
Fall, Spring.
Preparation of thesis to meet degree requirements. Arranged with major advisor.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Approval of advisor. Repeatable (6).

English (ENG)

ENG 101 Rhetoric & Writing I (GT-CO1) 3(3-0)
Fall, Spring, Summer.
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: None.
Corequisite: None.
Registration Information: None.
(GT-CO1)

ENG 102 Rhetoric & Writing II (GT-CO2) 3(3-0)
Fall, Spring, Summer.
Sequential course providing continued engagement with critical thinking, reading, argumentation, and using rhetorical techniques in academic writing. Emphasis on research strategies.
Prerequisite: ENG 101.
Corequisite: None.
Registration Information: ENG 101 must have earned a grade of C or better.
(GT-CO2)

ENG 106 (ANTH 106) Language, Thought and Culture 3(3-0)
As Needed.
Cross-cultural introduction to language processes in human society.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: SS) (CC)

ENG 114 Introduction to Creative Writing (GT-AH1) 3(3-0)
Fall, Spring.
An introduction to poetry, fiction, and creative non-fiction writing, stressing honest and clear writing and heightened critical thinking skills within a workshop setting.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH1) (CC)

ENG 115 Intro Tech Prof Writing GT-CO2 3(3-0)
Fall, Spring, Summer.
Course builds upon critical thinking, reading, and writing learned in ENG 101, with specific focus on the genre of technical communication and research.
Prerequisite: ENG 101.
Corequisite: None.
Registration Information: None.
(GT-CO2)

ENG 117 Intro. Scientific/Medical Writing (GT-CO2) 3(3-0)
Fall, Spring, Summer.
Course builds upon critical thinking, reading, and writing learned in ENG 101, with specific focus on the genre of scientific and medical communication and research.
Prerequisite: ENG 101.
Corequisite: None.
Registration Information: None.
(GT-CO2)

ENG 130 Introduction to Literature (GT-AH2) 3(3-0)
As Needed.
Introduction to the three major literary genres: fiction, poetry, and drama. The main emphasis is on close reading and textual analysis.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH2)

ENG 201 Introduction to Literary Theory (3 V)
As Needed.
Introduction to literary genres, major periods and writers, close reading and textual analysis, modern literary criticism, and research methods.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 204 (CID 204) Introduction to Rhetoric 3(3-0)
As Needed.
Provides an introduction to the rhetorical tradition in relationship to the needs of various cultural, technological, and professional contexts.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ENG 210 American Literature I 3(3-0)
As Needed.
Literature and literary history of America to 1865.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 212 American Literature II 3(3-0)
As Needed.
Literature and literary history of America from 1865 to the present.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 220 (CS 220) Survey of Chicano Literature (GT-AH2) 3(3-0)
As Needed.
Survey of outstanding contemporary Chicano works. Literature deals with Chicano themes, including analysis of folklore and myth.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH2) (CC)

ENG 221 Masterpieces of Literature I (GT-AH2) 3(3-0)
As Needed.
Significant writings in world literature from the ancients through the Renaissance and their backgrounds.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH2)

ENG 222 Masterpieces of Literature II (GT-AH2) 3(3-0)
As Needed.
Significant writings in world literature from the seventeenth century to the present and their backgrounds.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH2)

ENG 231 Literature of England I 3(3-0)
As Needed.
Literature and literary history of England from the Anglo-Saxon Period through the 18th Century.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 232 Literature of England II 3(3-0)
As Needed.
Literature and literary history of England in the Romantic, Victorian and Modern Periods.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 240 Multi-Ethnic American Literature (GT-AH2) (3 V)
As Needed.
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 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH2) (CC)

ENG 241 (WS 241) Women in Literature 3(3-0)
As Needed.
Intensive study of literature written by women, in historical, cultural, and critical contexts.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 291 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 302 Grant Writing 3(3-0)
As Needed.
Examines the strategies involved in professional grant writing. Students will produce and submit grant proposals in response to actual request for proposals.
Prerequisite: ENG 101 and ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 303 Advanced Rhetoric & Writing 3(3-0)
As Needed.
Advanced persuasive writing, including rhetoric and grammar.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 305 Technical and Scientific Report Writing 3(3-0)
As Needed.
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 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 306 Visual Rhetoric 3(3-0)
As Needed.
Rhetorical analysis through visual modes of communication; creation and manipulation of visual messages for a variety of audiences, purposes, situations.
Prerequisite: ENG 204.
Corequisite: None.
Registration Information: None.

ENG 310 Literary Forms & Genres (3 V)
As Needed.
Analyzes published writers, creative writing, and craft through writing based on the study and theory of a specified genre or form.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 315 Creative Writing: Poetry 3(3-0)
As Needed.
Introduction to writing poetry. A studio workshop for students to grow in their appreciation of poetic processes.
Prerequisite: ENG 114.
Corequisite: None.
Registration Information: None.

ENG 316 Creative Writing: Fiction 3(3-0)
As Needed.
Introduction to creating character, situation, and overall structure, emphasis on imaginative and real-life portrayal.
Prerequisite: ENG 114.
Corequisite: None.
Registration Information: None.

ENG 317 Creative Nonfiction 3(3-0)
As Needed.
Introduction to writing the reflective essay.
Prerequisite: ENG 114.
Corequisite: None.
Registration Information: None.

ENG 318 Creative Writing: Drama 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

ENG 319 Professional Editing 3(3-0)
As Needed.
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 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 328 Contemporary Literature (3 V)
As Needed.
Advanced study of a focused topic in contemporary literature (genre, theme, or set of related texts), in historical, cultural, and critical contexts.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: None.

ENG 352 English Syntax and Usage 3(3-0)
As Needed.
English usage and language systems, emphasis on forms and functions of language analysis.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ENG 360 Historical Perspectives in American Literature 3(3-0)
As Needed.
Advanced study of a focused topic in American literature, (genre, theme, or set of related texts), in historical, cultural, and critical contexts.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: Repeatable (12).

ENG 361 Historical Perspectives in Western Literature 3(3-0)
As Needed.
Advanced study of a focused topic in Western literature (genre, theme, or set of related texts), in historical, cultural, and critical contexts.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: Repeatable (12).

ENG 362 Historical Perspectives in Non-Western Literature (3 V)
As Needed.
Advanced study of a focused topic in Non-Western literature (genre, theme, or set of related texts), in historical, cultural, and critical contexts.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: Repeatable (12).

ENG 412 Young Adult Literature 3(3-0)
As Needed.
Literature suitable for adolescents, including classical and contemporary authors, and issues in selection and evaluation.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisite: None.
Registration Information: None.

ENG 414 Advanced Creative Writing Workshop 3(3-0)
As Needed.
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 or ENG 316 or ENG 317 or ENG 318.
Corequisite: None.
Registration Information: None.

ENG 441 Chaucer and His Age 3(3-0)
As Needed.
Chaucer and his contemporaries in their cultural and historical setting.
Prerequisite: ENG 201 or ENG 102 and HIST 102.
Corequisite: None.
Registration Information: None.

ENG 445 Magazine Editing and Production 3(3-0)
As Needed.
Writing, editing, and design for printing and Web publication of a general-circulation regional magazine.
Prerequisite: ENG 440 or MC 304 or 311 or 440.
Corequisite: None.
Registration Information: Permission of the instructor.

ENG 481 Shakespeare 3(3-0)
As Needed.
Representative works in various genres, with attention to cultural and critical contexts.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: None.

ENG 484 Studies in Major Writers 3(3-0)
As Needed.
Intensive study of a major writer or writers in historical, cultural, and critical contexts.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 485 Literary Criticism and Theory 3(3-0)
As Needed.
Traditional and contemporary critical theories of literature and their applications.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: None.

ENG 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 492 Research 3(3-0)
As Needed.
Introduces theory and methods of conducting research in rhetoric and literary studies.
Prerequisite: ENG 201.
Corequisite: None.
Registration Information: None.

ENG 493 Senior Seminar 3(3-0)
As Needed.
In-depth analysis of specific topics, themes, authors, and works in American, English or world literature.
Prerequisite: ENG 485.
Corequisite: None.
Registration Information: None.

ENG 494 Field Experience (1-5 V)
As Needed.
A semester-long internship. Student performs professional duties using English-related skills required by the cooperating agencies.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 495 Independent Study (1-3 V)
As Needed.
Directed, intensive study and guidance in studying major literary figures or movements, arranged with the chair of the department.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 501 Theories of Writing 3(3-0)
Fall.
Provides an introduction to and survey of modern writing theory. The course prepares students to apply theoretical principles to the practical concerns of writing pedagogy.
Prerequisite: None.
Corequisite: ENG 502.
Registration Information: None.

ENG 502 Research Methods 3(3-0)
Fall.
Introduces students to diverse opportunities for research methodology and academic discourse in English studies.
Prerequisite: None.
Corequisite: ENG 501.
Registration Information: None.

ENG 503 Literary Theory 3(3-0)
Spring.
An introduction to contempory literary and critical theory in English studies.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: None.

ENG 511 Major Authors 3(3-0)
As Needed.
Intensive study of the works of one or two major authors.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 512 Literature Survey 3(3-0)
As Needed.
Synthesis of literary attitudes, modes, genres of an age.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 522 Phonology & Morphology For ESL/EFL 3(3-0)
As Needed.
Introduction to English phonology, morphology, and morpho-syntax relevant to ESL/EFL teaching.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: None.

ENG 523 (CLDE 523) Syntax for TESL/TEFL 3(3-0)
As Needed.
Introduction to English syntactic structures relevant to ESL/EFL teaching. Includes an examination of core English structures from various perspectives.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ENG 525 Foundations of Technical Comm. 3(3-0)
As Needed.
Exploration of the theories, research methodologies, pedagogy, and practices of technical communication.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ENG 527 Graduate Creative Writing Workshop (3 V)
As Needed.
Group discussion of original student work, emphasizing plot, characterization, style, structure, theory, and other creative writing elements.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 530 (CLDE 530) Language Acquisition & Linguistics 3(3-0)
As Needed.
Development of English language from childhood through adulthood, including phonology, grammar, vocabulary, and communicative competence. Acquisition of English as a second language.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ENG 553 (CLDE 553) Language in the USA 3(3-0)
As Needed.
Explores language use in the U.S. and examines current language-related myths and issues in the U.S., including issues related to indigenous languages and immigrant languages.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

ENG 578 Workshop in the Teaching of Writing 3(3-0)
As Needed.
Theories of composition, methods, sources and resources for teachers of writing.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

ENG 589 Directed Study for MA Exams 3(3-0)
As Needed.
Directed study with student's advisor to prepare for taking MA exams that semester.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate Standing and permission of instructor. Repeatable (6).

ENG 591 Special Topics 3(3-0)
As Needed.
Varied topics covering cultural or historical areas, or literacy and discourse theory and practice, or professional pedagogical issues.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: Repeatable (99).

ENG 594 Field Experience 3(3-0)
As Needed.
Designed to prepare students for, and support them through their first semester as a teaching assistant at CSUP.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: Approval of instructor. Repeatable (99).

ENG 595 Independent Study (1-5 V)
As Needed.
Students will work with a professor in the department in order to create a rigorous course schedule on a topic of their choosing.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: Approval of instructor. Repeatable (99).

ENG 598 Internship (1-5 V)
As Needed.
Students who have sought and received an internship in the field of English Studies will work with their advisor in order to set expectations.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: Approval of instructor. Repeatable (99).

ENG 599 Thesis Research 3(3-0)
As Needed.
Thesis Research.
Prerequisite: ENG 501 and ENG 502.
Corequisite: None.
Registration Information: Approval of instructor. Repeatable (6).

English as a Second Language (ESL)

ESL 065 Beginning Reading/Writing 6(10-)
As Needed.
Learn reading skills/strategies to understand beginning texts. Respond to questions through discussion and writing. Read short outside texts. Write sentences and paragraphs with correct spelling.
Prerequisite: None.
Corequisites: None.
Registration Information: Acceptance to ELI.

ESL 066 Beginning Listening/Speaking 6(10-)
As Needed.
Develop academic skills in listening and speaking. Engage in speaking using comprehensible pronunciation. Understand simplified spoken English and respond appropriately both orally and in writing.
Prerequisite: None.
Corequisites: None.
Registration Information: Acceptance to ELI.

ESL 075 Intermediate Reading/Writing 6(10-)
As Needed.
Develop critical thinking skills. Improve reading speed and comprehension. Learn skills necessary for academic writing: development of paragraphs and compositions using description, narrative, and chronology.
Prerequisite: None.
Corequisites: None.
Registration Information: Acceptance to ELI.

ESL 076 Intermediate Listening/Speaking 6(10-)
As Needed.
Understand spoken English in common settings. Practice speaking appropriately in academic and social situations. Use multimedia to develop communicative competence.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance to ELI.

ESL 085 High-Intermediate Reading/Writing 6(10-)
As Needed.
Read authentic and ESL materials with increasing critical ability and speed. Write more intelligibly and decrease grammatical errors. Understand several types of essay organization.
Prerequisite: None.
Corequisites: None.
Registration Information: Acceptance to ELI.

ESL 086 Hi-Intermediate Listening/Speaking 6(10-)
As Needed.
Understand spoken English at near normal speed. Improve fluency. Interact more confidently with other students and in presentations. Use multimedia to increase communicative competence.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance to ELI.

ESL 091 Special Topics (1-12 V)
As Needed.
Selected topics in ESL.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance to ELI. Repeatable (99).

ESL 095 Advanced Reading/Writing 6(10-)
As Needed.
Read authentic materials with near-native critical ability and speed. Write intelligibly with few grammatical and idiomatic errors. Understand thoroughly essay organization and development.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance to ELI.

ESL 096 Advanced Listening/Speaking 6(10-)
As Needed.
Understand English at natural speed in social, academic, and professional situations. Speak confidently through interaction with native speakers and presentations. Multimedia experience enhances communicative competence.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance to ELI.

Escrow (ESCR)

ESCR 100 Escrow Credit (LWD) (1-33 V)
As Needed.
Lower division escrow credits.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ESCR 300 Escrow Credit (XUP) (1-33 V)
As Needed.
Upper division escrow credits.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

Exercise Science, Physical Education, & Recreation

EPER 101 Intro to EXPER 2(2-0)
Fall, Spring.
Introduction to fundamentals of exercise science, physical education, and recreation professions. Overview of fitness, conditioning, athletic training, recreation and school-based programs, and career opportunities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 102 Mountain Orientation 2(1-2)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 103 Winter Orientation 2(1-2)
As Needed.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 104 Desert Orientation 2(1-2)
As Needed.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 105 Canyon Orientation 2(1-2)
As Needed.
Students will develop proficiency in canyon travel, group camping, and will explore the geology, geography, and ecology of the canyon country.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 106L Martial Arts and Self-Defense 1(0-2)
As Needed.
Overview of the history, philosophy and techniques of martial arts and self-defense. Includes skill development of physical techniques.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 107L Triathlon 1(0-2)
As Needed.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 108L Yoga 1(0-2)
As Needed.
This course will focus on key concepts in basic yoga resulting in development of valuable life skills related to creating healthy lifestyles.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 109L Volleyball 1(0-2)
As Needed.
An introduction to the fundamental skills, rules and strategies used in power volleyball.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 110L Weight Training 1(0-2)
As Needed.
An introduction to basic strength evaluation, fundamental machine and free weight techniques and safety concepts in the weight room.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 111 Commitment to Academic Excellence 1(1-0)
Fall, Spring.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 112L Rock Climbing 1(0-2)
Spring.
An introduction to the basic understanding of rock climbing, equipment, Leave No Trace environmental ethics and rock climbing as an outdoor recreational activity.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 113L Whitewater Boating 1(0-2)
As Needed.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 114L Basic Mountaineering Techniques 1(0-2)
Fall.
Students will learn necessary information and techniques including clothing, equipment, physical conditioning, stewardship, access, knot tying, and will participate in an incline climb.
Prerequisites: None.
Corequisites: None.
Registration Information: Basic outdoor skills highly recommended.

EPER 116L Camping 1(0-2)
As Needed.
A basic camping class designed to teach the fundamentals of self-sufficient tent camping. Emphasizes clothing, equipment selection, nutrition, and Leave No Trace guidelines.
Prerequisites: None.
Corequisites: None.
Registration Information: Basic outdoor skills highly recommended.

EPER 117L Backpacking 1(0-2)
Fall.
Introduction course on the basics of traveling in the back country with everything one needs in their backpack. Clothing, equipment, orienteering, first aid, route and campsite selection are emphasized during required trips.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 118L Fly Fishing 1(0-2)
As Needed.
An introduction to the basic concepts of fly-fishing. This course includes classroom sessions and field experiences that promote the development and application of practical skills.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 119L Walking for Fitness 1(0-2)
As Needed.
The introduction and development of skills, safety, understanding of body functions and basic conditioning related to aerobic fitness through walking.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 120L Introduction to Search and Rescue 1(0-2)
As Needed.
This course is an introduction to Search and Rescue. Topics include; Incident command systems, search philosophy, strategy, tactics, lost person behavior, equipment, travel and navigation.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 121L Aerobics Instructor Training 1(0-2)
As Needed.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 122L Military Physical Training 1(0-2)
Fall, Spring.
Introduction to physical fitness and training. Students participate in practical training and learn the basics of fitness, nutrition and flexibility.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 123L Zumba 1(0-2)
Fall, Spring.
Zumba is a non-competitive fitness dance program which teaches students to perform steps such as the salsa, meringue, cha-cha, samba, tango, reggaeton, and calypso.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 124L Tai Chi 1(0-2)
As Needed.
Complete form of Tai Chi postures based on Yang/Sun Style will be practiced. Mandarin terminology, health philosophy and Taijiquan will be defined and discussed.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 125L Snow Sports 1(0-2)
Spring.
Beginning fundamental snowboarding and skiing. Students choose level 1-3 skiing and/or boarding lesson at Colorado ski resort. Emphasis on safety, equipment, clothing and trip planning.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 126L Personal Fitness 1(0-2)
As Needed.
Students will learn how to evaluate their personal fitness level and develop a comprehensive exercise program beneficial to their overall health and wellness.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 127L Jogging 1(0-2)
As Needed.
An introduction to walking/jogging/running techniques, training programs, fitness assessment, appropriate footwear and safety considerations.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 128L Aerobics 1(0-2)
As Needed.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 143L Folk, Square, and Ballroom Dance 1(0-2)
As Needed.
Overview of the music and dance techniques used in Folk, Square and Ballroom dancing.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 146L Beginning Swimming 1(0-2)
As Needed.
Introduces the knowledge and skill necessary to handle the body with ease in the water and covers basic mechanical, physiological, and psychological concepts.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 162 Personal Health 3(3-0)
Fall, Spring, Summer.
The development of knowledge and the scientific basis for the analysis, evaluation and promotion of personal health and wellness.
Prerequisites: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: ST)

EPER 162L Personal Health Lab 1(0-2)
Fall, Spring, Summer.
Optional experiential lab studies to augment EPER 162.
Prerequisites: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: ST)

EPER 174L Tennis 1(0-2)
As Needed.
An introduction to the fundamental skills, rules and strategies used in the game of tennis.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 175L Racquetball 1(0-2)
As Needed.
An introduction to the fundamental skills, rules and strategies used in the game of racquetball.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 176L Life Guard Training 2(1-2)
As Needed.
American Red Cross lifeguard certification course that prepares successful candidates to be certified in Lifeguarding, First Aid, and CPR. A swimming pre-test must be passed the first day of class.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 187L Intercollegiate Sports I 2(0-4)
Fall, Spring.
Participation in an intercollegiate sports program. Course registration is limited to freshman competing in a varsity sport program offered by CSU Pueblo.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 201 Drugs and Healthy Lifestyles 3(3-0)
Fall, Spring.
An overview of the impact of drug abuse in today's society along with prevention information and treatment programs available.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 205L Snow Sports II 1(0-2)
Spring.
For students with experience in snow sports including skiing and/or snowboarding. Emphasis on safety and techniques of telemark skiing, cross country skiing, and snowshoeing.
Prerequisites: None.
Corequisites: None.
Registration Information: Ski or snowboard experience strongly suggested.

EPER 208L Yoga II 1(0-2)
Fall, Spring.
For students with prior experience in yoga. Emphasis on creating balance in both strength and flexibility through the performance of a variety of postures.
Prerequisite: None.
Corequisite: None.
Registration Information: Previous yoga experience strongly recommended.

EPER 211 Commitment to Service 1(1-0)
Fall, Spring.
Life skills for Sophomore Student-Athletes to enhance their experience by engaging the student in service to his or her campus and surrounding communities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 212 Sports Nutrition 3(3-0)
Fall.
Introduces topics aligned with (NSCA) nutrition standards. Students will learn basic nutritional science, the health risks/benefits associated with common diets/choices, and the use of diet to maximize performance.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 222 Behavior Facilitation 3(3-0)
Fall, Spring.
Study the influence of social and behavioral systems on health. Emphasis on the fundamentals of self-directed behavior change, health dysfunctions, and stress management.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 233 History & Principles of Physical Education & Rec 2(2-0)
Fall.
Study of the history, philosophy and perspectives of physical education and recreation, and their influence upon contemporary American society.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 240 Recreation Program Design 3(3-0)
Fall.
Rationale supporting and methods of conducting recreation programs in a wide variety of public, private, voluntary and commercial recreation agencies.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 243 Methods of Rhythmic Activities 2(2-0)
Spring.
Fundamentals of folk, square and social dance; emphasis on the teaching techniques involved in basic dance styles and rhythms.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 245 Motor Learning and Development 3(3-0)
Spring.
Applied analysis of motor learning and motor development principles and theories throughout the human life span.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 246L Methods of Swimming 1(0.5-1.5)
Fall.
Instruction in methods of teaching techniques, stroke analysis, class organization, pool safety, and pool maintenance. Practice teaching assignments with practical and written final exams.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 249 Challenge Course Leadership 2(2-0)
Fall, Spring.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 250 Commercial Recreation and Tourism 3(3-0)
Fall.
Designing for-profit recreation programs and facilities that are linked to tourism. Practical approach to programming in a commercial setting.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 270 Outdoor Leadership I 2(1-2)
Fall.
An introduction to the concepts of outdoor leadership including a field experience focused on the application of theoretical and practical concepts.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 276L Water Safety Instructor Certification 2(1-2)
As Needed.
Water safety instruction certification may be earned in this course.
Prerequisite: EPER 176L.
Corequisite: None.
Registration Information: Permission of instructor.

EPER 280 Foundations of Therapeutic Recreation 3(3-0)
Fall.
Prescribed recreational activities as clinical treatment modality for impaired clients. Services for developmentally delayed, law offenders, psychologically impaired, sensory impaired, physically disabled, disadvantaged or aging.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 287L Intercollegiate Sports II 2(0-4)
Fall, Spring.
Participation in an intercollegiate sports program. Course registration is limited to sophomore student-athletes competing in a varsity sport program offered at CSU Pueblo.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 291 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

EPER 301 Fitness Technology & Applications 1(1-0)
Fall, Spring.
Students will analyze and apply technology utilized in the fitness and exercise science industry through experiential learning strategies. Performance analysis, HRV, body comp, and other current trends will be explored.
Prerequisite: BIOL 223 and BIOL 223L.
Corequisite: None.
Registration Information: None.

EPER 310L Adv Methods Strength & Conditioning 2(1-2)
Spring.
Integration of the science and application of strength and conditioning methods. Emphasis on learning to perform and teach advanced strength, power, and functional movement techniques.
Prerequisite: None.
Corequisite: None.
Registration Information: Students must have general weight training skills that are approved by the instructor or take EPER 110L.

EPER 320 NSCA Test Preparation 3(3-0)
Spring.
This course is designed to prepare students to take the National Strength and Conditioning Association Certified Personal Trainer or Strength and Conditioning Specialist certification exams.
Prerequisite: BIOL 223 and 223L and EPER 344 and 344L.
Corequisite: None.
Registration Information: None.

EPER 322 Wilderness First Aid 2(2-0)
Fall.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 343 Research and Statistics 3(3-0)
Fall, Spring, Summer.
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 101 or MATH 120 or MATH 156.
Corequisite: None.
Registration Information: None.

EPER 344 Exercise Physiology 3(3-0)
Fall, Spring.
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 and BIOL 223L; EPER 343; MATH 101 or MATH 120 or MATH 156.
Corequisite: None.
Registration Information: None.

EPER 344L Exercise Physiology Lab 1(0-2)
Fall, Spring.
Extension of course lecture which provides practical experience in laboratory experiments which address exercise and exercise theory.
Prerequisite: BIOL 223 and BIOL 223L and EPER 343 and MATH 101 or MATH 120 or MATH 156.
Corequisite: None.
Registration Information: None.

EPER 345 Methods of Physical Activities & Games I 2(2-0)
Fall.
Teaching procedures, skills and techniques of physical activities and games (e.g. adventure education, soccer, basketball, team handball and lacrosse).
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 346 Methods Physical Activities & Games II 2(2-0)
Spring.
Teaching procedures, skills and techniques of physical activities and games (e.g. volleyball, football, hockey, track/field and softball).
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 347 Methods of Fitness Instruction 1(1-0)
Fall.
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: None.
Corequisite: None.
Registration Information: Junior or senior status recommended.

EPER 348 Methods of Individual and Dual Sports 3(3-0)
Fall.
Basic skills and techniques of tennis, racquetball, badminton and golf; emphasis on teaching procedures in these activities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 349 Methods of Outdoor PE & Sustainability 2(2-0)
Fall.
Prepares teachers with skills/knowledge to teach outdoor physical education and sustainability in schools including technical leader skills and sustainability education activities using playgrounds, trails, and natural areas.
Prerequisite: EPER 233.
Corequisite: None.
Registration Information: None.

EPER 350 Leadership & Ethics 3(3-0)
Spring.
Addresses leadership techniques and styles, leadership theory, group dynamics, and ethical considerations in recreation.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Permission of instructor.

EPER 351 Methods of Teaching Elem Physical ED 3(3-0)
Fall.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: Acceptance into Teacher Education Program.

EPER 360 Outdoor Education 3(3-0)
Fall.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

EPER 362 Methods of Health Education 3(3-0)
Spring.
Evaluation of current health topics such as human sexuality, violence, environmental and psychoneuroimmunology and their impact on the health of the individual and community.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 364 Kinesiology 3(3-0)
Fall, Spring.
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.
Prerequisites: BIOL 223 and BIOL 223L.
Corequisites: None.
Registration Information: None.

EPER 370 Outdoor Leadership II 2(1-2)
Spring.
A practical application of the concepts and theory introduced in REC 270. Students will be required to plan and lead REC 104.
Prerequisite: EPER 270.
Corequisite: None.
Registration Information: None.

EPER 375 Research & Evaluation of Recreation 3(3-0)
Fall.
Provides an overview of research designs and methodologies using recreation participation data, for needs assessment and program evaluation.
Prerequisite: None.
Corequisite: None.
Registration Information: Completion of general education math course highly recommended.

EPER 381 Environmental Interpretation 3(3-0)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 389 Recreation Practicum 3(0-3)
Fall, Spring, Summer.
Involves selected practical experiential opportunities in Recreation Leadership. Minimum of 150 hours of practical experience in a selected recreation agency.
Prerequisite: REC 280 and REC 360.
Corequisite: None.
Registration Information: None.

EPER 400 Workshop (1-5 V)
As Needed.
Learning experience in physical education offered in large blocks of time not corresponding to the weekly meeting times of the regular course offerings.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of program chair. Repeatable (99).

EPER 432 Applied Sport & Exercise Psychology 3(3-0)
Spring.
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: None.
Corequisite: None.
Registration Information: PSYC 205 strongly recommended.

EPER 436 Exercise Assessment & Prescription 3(3-0)
Fall, Spring.
Methods used to assess exercise clients and prescribe effective exercise programs in order to achieve optimal health. Referral for at risk clients will be discussed.
Prerequisite: EPER 344 and EPER 344L.
Corequisite: None.
Registration Information: None.

EPER 440 Biomechanics 3(3-0)
As Needed.
Course reviews application of basic physics and anatomy for analysis of complex human movement focusing on improving movement efficiency and reducing the potential for injury.
Prerequisite: BIOL 223 and BIOL 223L; EPER 364; MATH 101 or MATH 120 or MATH 156.
Corequisite: None.
Registration Information: None.

EPER 461 Managing Events & Programs 3(3-0)
Spring.
Organizational and administrative functions used in a modern management approach to programs in Physical Education, Health Promotion, Athletics, Fitness, and Recreation.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing.

EPER 464 Adapted Physical Education 3(3-0)
Spring, Odd.
Programs for diverse populations in physical education; emphasis on environments, diseases and injuries which cause individuals to require special attention.
Prerequisite: None.
Corequisite: None.
Registration Information: BIOL 223 and BIOL 223L strongly recommended.

EPER 465 Adapted Physical Education 3(3-0)
Spring, Odd.
Programs for diverse populations in physical education; emphasis on environments, diseases and injuries which cause individuals to require special attention.
Prerequisite: None.
Corequisite: None.
Registration Information: BIOL 223 and BIOL 223L strongly recommended.

EPER 469 Coaching/Officiating Track & Field 2(2-0)
As Needed.
Techniques and strategies of coaching and officiating track and field.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 470 Methods of Coaching 3(3-0)
Fall.
Study of the science and art of coaching. Understanding of the physical, mental, and emotional demands of coaching. Required course for coaching certification in Colorado.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 471 Coaching & Officiating Football 2(2-0)
As Needed.
Techniques and strategy of coaching and officiating football.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 472 Coaching and Officiating Basketball 2(2-0)
As Needed.
Techniques and strategy of coaching and officiating basketball.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 475 Coaching and Officiating Volleyball 2(2-0)
As Needed.
Techniques and strategy of coaching and officiating volleyball.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 478 Methods of Secondary Physical Education 3(2-2)
Fall.
Study of effective teaching with emphasis on teaching methods, student learning time, classroom management and program planning.
Prerequisite: None.
Corequisite: None.
Registration Information: 30 hours field experience and admission to Teacher Education Program.

EPER 480 Business of Tourism 3(3-0)
Spring.
An in-depth examination of tourism theory and methods with a regional scope. This course utilizes a business lens to apply skills in a specialized tourism context. Special attention is focused on challenges within tourism.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 481 Sustainable Practices 3(3-0)
As Needed.
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 and BIOL 121L.
Corequisite: None.
Registration Information: None.

EPER 482 Coaching and Officiating Wrestling 2(2-0)
As Needed.
Techniques and strategy of coaching and officiating wrestling.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 483 Coaching and Officiating Baseball 2(2-0)
As Needed.
Techniques and strategy of coaching and officiating baseball.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 484 Outdoor Resources & Management 3(3-0)
Spring.
Examination of the outdoor recreation experience, the organization of resource-based recreation management and key outdoor recreation policy issues.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Permission of instructor.

EPER 485 Recreation Facility Design/Management 3(3-0)
As Needed.
Presentation of basic elements of design and management of recreational facilities, taking into account the interaction between natural resources and man-made structures.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 486 Coaching And Officiating Soccer (2 V)
As Needed.
Techniques and strategies of coaching and officiating soccer.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 491 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of Instructor. Repeatable (99).

EPER 492 Research (1-6 V)
Fall, Spring, Summer.
Research project conducted in collaboration with a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of a faculty member. Repeatable (6).

EPER 493 Seminar 2(2-0)
As Needed.
Examination of important issues, problems and trends in the professional arena, type of internships, advanced education and jobs available, mock interviews, portfolio development, job preparation, and shadowing in the field.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior Status. EPER 493 strongly recommended before EPER 498.

EPER 494 Field Experience (1-12 V)
Fall, Spring, Summer.
Supervised experiential learning conducted in the professional environment. Experiences/projects must represent the exercise science, recreation or coaching fields. Site supervisor will have at least 5 years of experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of the field experience coordinator and agreement paperwork is required. Repeatable (12).

EPER 495 Independent Study (1-5 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of Department Chair. Repeatable (99).

EPER 498 Internship (1-12 V)
Fall, Spring, Summer.
Supervised experience with approved mentors in select health science settings. Activities include the completion of a major project and other assignments. Minimum of 6 credit hours required for HS majors.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Completion of all other degree requirements. 2.50 GPA in the major. Internship coordinator approval. Completion of Internship Agreement Form. Completion of EPER 493 highly recommended before enrolling in this course. Repeatable (12).

EPER 500 Workshop (1-5 V)
As Needed.
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: None.
Corequisite: None.
Registration Information: Approval of program chair.

EPER 501 Advanced Fitness Tech & Applications 1(1-0)
As Needed.
Advanced analysis of technology utilized in the fitness and exercise science industry through experiential learning strategies. Performance analysis, HRV, body comp, and other current trends will be applied in field setting.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 522 Methods of Elementary Physical Education 3(3-0)
As Needed.
Advanced study of effective teaching for elementary children including; maximizing student learning, student and self-assessment, utilization of resources, planning, implementation and revision.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 529 CurriculumIn Physical Education 2(2-0)
Summer.
The advanced study of physical education curriculum models, planning, and evaluation.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 532 Applied Sport & Exercise Psychology 3(3-0)
As Needed.
This course will explore advanced application of psychological theories and techniques for the enhancement of both sport and exercise.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 536 Community Health 3(2-2)
Fall.
Advanced study of the aspects of community and public health, functions of health services, and application of community health theory.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

EPER 549 Facilitation of Adventure Education 3(3-0)
Summer.
Planning and implementing adventure activities that provide challenge, choice, and opportunities for personal and group growth. Emphasis on program development, facilitation techniques.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 550 Leadership and Ethics 3(3-0)
Spring.
Advanced study of leadership techniques and styles, leadership theory, group dynamics, and ethical considerations in recreation.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 560 Outdoor Education 3(3-0)
Fall.
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: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 562 Contemporary Issues In Hpe 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 565 Adapted Physical Education 3(3-0)
Spring, Odd.
Advanced study of programs for diverse populations in physical education; emphasis on environments, diseases and injuries which cause individuals to require special attention.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 569 Outdoor Leadership I 2(1-2)
Fall.
Concepts of outdoor leadership including field experience focused on the application of theoretical and practical ideas and research.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

EPER 570 Methods of Coaching 3(3-0)
Fall.
Advanced study of the science of coaching. Understanding of the physical, mental, and emotional demands of coaching. Required course for coaching certification in Colorado.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing.

EPER 571 Outdoor Leadership II 2(1-2)
Spring.
Advanced practicum in outdoor leadership. Includes responsibilities in trip planning, management, evaluation, group facilitation and processing, and natural resource agency relations.
Prerequisite: EPER 569.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 578 Methods of Secondary School PE 3(3-0)
Fall.
Advanced study of effective teaching in secondary schools with emphasis on teaching methods, student learning, classroom management and program planning.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 584 Outdoor Resources and Management 3(3-0)
Spring.
Advanced study of the outdoor recreation experience, the organization of resource-based recreation management and key outdoor recreation policy issues.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 585 Methods in Health Promotion 3(2-2)
Fall.
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: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor.

EPER 591 Special Topics (1-5 V)
As Needed.
Graduate level study or activity designed to increase understanding in areas not covered by regular offerings of the department.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of program chair.

EPER 592 Research (1-6 V)
Fall, Spring, Summer.
Graduate level research project conducted in collaboration with a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of a faculty member. Repeatable (6).

EPER 594 Field Experience 1-12(0-1-12)
Fall, Spring, Summer.
Graduate level field experience project completed in coordination with a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Faculty permission and fieldwork agreement are required. Repeatable (6).

EPER 595 Independent Study (1-6 V)
Fall, Spring, Summer.
Graduate level independent study completed in coordination with a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Faculty permission. Repeatable (99).

Extended Studies (EXST)

EXST 101 Introduction to Portfolio Development (1 V)
As Needed.
Students write and explain experiences and experiential learning and demonstrate masteries through this portfolio product, which can then be used to apply for Prior Learning Assessment (PLA) credit.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).
(CC)

Finance (FIN)

FIN 291 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

FIN 330 Principles of Finance 3(3-0)
Fall, Spring.
Principles of finance involved in problems confronting business organizations.
Prerequisite: ACCT 201; ECON 201 and ECON 202; BSAD 265 or MATH 156.
Corequisite: None.
Registration Information: None.

FIN 331 Managerial Finance: Policy, Planning and Control 3(3-0)
As Needed.
Financial management, planning, policy formulation and financial decision making.
Prerequisite: FIN 330.
Corequisite: None.
Registration Information: None.

FIN 333 Investment Analysis 3(3-0)
As Needed.
Analysis and forecasting of security markets, industry and company studies, portfolio selection and management.
Prerequisite: FIN 330.
Corequisite: None.
Registration Information: None.

FIN 430 Financial Institution and Markets 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

FIN 431 Financial Policy Analysis 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

FIN 470 Entrepreneurial Finance 3(3-0)
As Needed.
This course focuses on how to apply financial tools and techniques to the planning, funding, operation, and valuation of an entrepreneurial venture.
Prerequisite: FIN 330.
Corequisite: None.
Registration Information: None.

FIN 475 International Finance 3(3-0)
As Needed.
Illustrate theories and the current issues of international finance. Topics include the determination of exchange rates, intervention and international monetary systems.
Prerequisite: FIN 330.
Corequisite: None.
Registration Information: None.

FIN 490 Special Projects (1-6 V)
As Needed.
Special Projects.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

FIN 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

FIN 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: FIN 330.
Corequisite: None.
Registration Information: Permission of department chair. Repeatable (6).

FIN 498 Internship (1-6 V)
As Needed.
Supervised field work in selected business, social and governmental organizations; supplemented by written reports.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior standing. Repeatable (6).

FIN 501 Fundamentals of Finance 1.5(1.5-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

FIN 505 Principles of Finance 3(3-0)
As Needed.
Principles of finance involved in problems confronting business organizations.
Prerequisite: ACCT 505 or ECON 505.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

FIN 530 Financial Management 3(3-0)
Fall, Summer.
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: FIN 330.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

FIN 575 International Financial Management 3(3-0)
As Needed.
Financial theory and practice as applied to the financial management of multinational corporations.
Prerequisite: FIN 530.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

FIN 591 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director. Repeatable (6).

FIN 595 Independent Study (1-3 V)
As Needed.
Individual study of a subject determined by the instructor and student with permission of the director.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director. Repeatable (6).

French (FRN)

FRN 101 Beginning French I (3 V)
Fall, Even.
Development of skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

FRN 102 Beginning French II (3 V)
Spring, Even.
Continuation of the development of skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: FRN 101.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H) (CC)

FRN 201 Intermediate French I (GT-AH4) 3(3-0)
As Needed.
Development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: FRN 102.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H, GT-AH4) (CC)

FRN 202 Intermediate French II (GT-AH4) 3(3-0)
As Needed.
Continued development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: FRN 201.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H, GT-AH4) (CC)

FRN 287 Intensive French Study Abroad (1-9 V)
As Needed.
Study of French in an immersion setting abroad, preparing the student for fluency through the study of grammar, civilization and culture, at an approved institution.
Prerequisite: FRN 102.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (9).

FRN 294 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: FRN 201.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (7).

FRN 301 Advanced French Grammar 3(3-0)
As Needed.
A concentrated study of French grammar in addition to practice in writing, reading, speaking, and listening.
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.

FRN 303 French Phonetics and Diction 3(2-2)
As Needed.
French pronunciation: theory, correction and practice of diction and intonation. Phonetic transcription and practical exercises.
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: Permission of instructor.

FRN 312 Conv & Comp: Europe 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of French-speaking countries and regions in Europe. (Culture, History, Literature, Art, Gastronomy, Current Events, etc).
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: None.

FRN 313 Conv & Comp: Africa & Caribbean 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of Francophone cultures in Africa and the Caribbean. (Culture, History, Literature, Art, Gastronomy, Current Events, etc).
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: None.

FRN 314 Conv & Comp: North America 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of Francophone cultures in the U.S. and Canada. (Culture, History, Literature, Art, Gastronomy, Current Events, etc).
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: None.

FRN 341 French through Literature 3(3-0)
As Needed.
Focus on improving linguistic proficiency (reading, writing, listening and speaking) through the study of literary works from France and the Francophone World.
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: Permission of instructor.

FRN 351 French through Film 3(3-0)
As Needed.
Focus on improving linguistic proficiency (reading, writing, listening and speaking) through the study cinema of the French and Francophone World.
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: None.

FRN 381 French Civ: France 3(3-0)
As Needed.
Focus on improving linguistic proficiency through the study of french history. Students will engage with literary, historic and filmic texts.
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: Permission of instructor.

FRN 382 French Civ: Francophone World 3(3-0)
As Needed.
Focus on improving linguistic proficiency through study of history and contemporary events affecting the francophone world. Students will engage with literary, historic and filmic texts.
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: Permission of instructor.

FRN 387 Intensive French Study Abroad (1-12 V)
As Needed.
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: FRN 201.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

FRN 391 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: Repeatable (9).

FRN 394 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: FRN 202.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (7).

FRN 494 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: None.
Corequisites: None.
Registration Information: Two years college French. Repeatable (99).

FRN 495 Independent Study 1-3(1-3-1-3)
As Needed.
Specific themes which address particular problems of literature or civilization.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

Geography (GEOG)

GEOG 101 Physical Geography 3(3-0)
Fall.
Three Earth spheres: the hydrosphere (oceanography, hydrologic cycle); the atmosphere (meteorology and climatology) and the lithosphere (geology, internal/external processes) are emphasized and examined.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

GEOG 102 Cultural Geography 3(3-0)
As Needed.
Emphasis on cultural regions, cultural diffusion, and cultural landscape. Major themes are culture, population, agriculture, language and religion, ethnicity, urbanization, industry, and political geography.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

GEOG 103 World Regional Geography (GT-SS2) 3(3-0)
Fall, Spring.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: SS, GT-SS2) (CC)

GEOG 291 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

GEOG 312 Colorado Geography 3(3-0)
As Needed.
CO geography including landforms, climate, biology, natural/water resources, settlement history, population growth/distribution, agriculture/ranching, power/transportation, manufacturing/service industries, urban landscape.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

GEOG 491 Special Topics 3(3-0)
Fall, Spring, Summer.
Devoted to special topics in Geography (human, physical, and regional).
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or Senior standing. Permission of instructor. Repeatable (99).

Geology (GEOL)

GEOL 101 Earth Science (GT-SC2) 3(3-0)
Fall, Spring.
Four earth spheres: the hydrosphere (oceanography, hydrologic cycle); the atmosphere (meteorology and climatology); the lithosphere (geology; internal and external processes); and space are emphasized.
Prerequisite: None.
Corequisite: None.
Registration Information: Co-enrollment in GEOL 101L strongly recommended.
(Gen Ed: ST, GT-SC2)

GEOL 101L Earth Science Lab (GT-SC1) 1(0-2)
Fall, Spring.
Lab to accompany GEOL 101 lecture.
Prerequisite: None.
Corequisite: None.
Registration Information: Co-enrollment in GEOL 101 strongly recommended.
(Gen Ed: ST, GT-SC1)

GEOL 114 Oceanography 3(3-0)
As Needed.
Study of world oceans and their role in the Earth system, including chemical, physical, geological, meteorological and biological aspects of the sea.
Prerequisite: None.
Corequisite: None.
Registration Information: Co-enrollment in GEOL 114L strongly recommended.
(Gen Ed: ST)

GEOL 114L Oceanography Lab 1(0-2)
As Needed.
Lab to accompany GEOL 114 lecture.
Prerequisite: None.
Corequisite: None.
Registration Information: Co-enrollment in GEOL 114 strongly recommended.
(Gen Ed: ST)

German (GER)

GER 101 Beginning German I 3(3-0)
Fall, Even.
Development of skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

GER 102 Beginning German II 3(3-0)
Spring, Even.
Continuation of the development of skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: GER 101.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H) (CC)

GER 201 Intermediate German I 3(3-0)
As Needed.
Development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: GER 102.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H) (CC)

GER 202 Intermediate German II 3(3-0)
As Needed.
Continued development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: GER 201.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H) (CC)

GER 301 Advanced German Grammar 3(3-0)
As Needed.
A concentrated study of German grammar in addition to practice in writing, reading, speaking, and listening.
Prerequisite: GER 202.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.

GER 303 Conv And Comp: German 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of German culture.
Prerequisite: GER 202.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.

GER 381 German Civilization I 3(3-0)
As Needed.
German geography, culture and history from the beginning to the present.
Prerequisite: GER 202.
Corequisites: None.
Registration Information: Permission of instructor.

GER 382 German Civilization II 3(3-0)
As Needed.
German Civilization II.
Prerequisite: GER 202.
Corequisites: None.
Registration Information: Permission of instructor.

Health Science (HS)

HS 101 Introduction to Health Professions 2(2-0)
Fall, Spring, Summer.
Introduction to health professions, education requirements, required certifications, accreditation and employment opportunities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 230 Foundations of Public Health 3(3-0)
Fall, Spring.
Overview of key public health concepts, history, and how the core areas of public health help to promote population health. Employs active learning through individual activities, discussions, and field experiences.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 291 Special Topics (1-4 V)
As Needed.
Special Topics in Health Sciences.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 312 Nutrition & Food Systems in Public Health 3(3-0)
As Needed.
Students will learn about food systems at the local, regional, and global levels. Students will examine and discuss critical topics involving health, culture, food production, processing, distribution, and consumption.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 320 Evaluation of Public Health Issues 3(3-0)
Fall.
Critical examination of the social determinants of health, current issues in the US health system, and legal, administrative, and ethical considerations in public health and their impact on individuals and communities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 322 Health Coaching Concepts (3 V)
Fall.
This course will address the core concepts of client centered health coaching including preventive health issues, basics of effective health coaching, motivational interviewing, ethical and legal guidelines, and compliance.
Prerequisite: EPER 222.
Corequisite: None.
Registration Information: None.

HS 325 Health Communication (3 V)
As Needed.
Examination of the effects of the media, mass, social, and participator, in promoting and impeding the achievement of public health goals. Students will develop the skills to design, implement and evaluate health campaigns.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 330 Epidemiology & Disease Prevention 3(3-0)
Fall, Spring.
Overview of principles of epidemiology and lifestyle-disease pathophysiology. Examines the use and broad application of epidemiologic concepts in public health to identify risk factors and resolve health issues in society.
Prerequisite: MATH 101 or MATH 120 or MATH 156.
Corequisite: None.
Registration Information: HS 230 strongly recommended.

HS 335 Public Health and the Environment 3(3-0)
Spring.
This course introduces major issues of environmental health science, examines what those issues are, what determines them, how they impact population health, and ways in which they can be altered to improve health.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 336 Community and Global Health 3(3-0)
Spring.
An examination of the political, religious, social and economic influences on the continuum of local/globe health and the role citizenship plays in advocating for the equitable distribution of health resources.
Prerequisite: None.
Corequisite: None.
Registration Information: HS 230 strongly recommended.

HS 402 Grant Writing & Community Partnerships 3(3-0)
As Needed.
The course focuses on the grant writing process for public health and the health sciences, and identifying and developing individual and agency partners for community-based health and wellness initiatives.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 422 Applied Health Coaching 3(3-0)
Spring.
This course will address advanced concepts in Health Coaching and explore challenging issues regarding health coaching topics, legal and ethical issues, and provide opportunities for experiential application activities.
Prerequisite: HS 322.
Corequisite: None.
Registration Information: None.

HS 430 Public Health Program Planning 3(3-0)
Fall.
Assessment and planning methods for public health. Activities include gathering health related data, conducting needs assessments and reviewing or developing evidenced based, city, county and state level program plans.
Prerequisite: HS 230.
Corequisite: None.
Registration Information: None.

HS 435 Public Health Program Evaluation 3(3-0)
Spring.
Practical applications for the development of skills in public health program implementation and evaluation methods within a variety of settings including community, school/workplace and online.
Prerequisite: HS 230.
Corequisite: None.
Registration Information: None.

HS 491 Special Topics (1-6 V)
As Needed.
Special topics in Health Science.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 492 Research (1-6 V)
Fall, Spring, Summer.
Research project conducted in collaboration with a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of faculty member. Repeatable (6).

HS 493 Seminar 2(2-0)
Fall, Spring, Summer.
Examination of important issues and trends in the professional arena, type of internships, advanced education and jobs available, mock interviews, portfolio development, job preparation, and shadowing in the field.
Prerequisites: None.
Corequisites: None.
Registration Information: Senior status required. Highly recommend this course before HS 498.

HS 494 Field Experience (1-12 V)
Fall, Spring, Summer.
Supervised experiential learning activities to be conducted in the actual professional environment. Project and work experiences must represent the Health Sciences field. Student arranges the site. Requires field agreement.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of field experience coordinator. Completion of field experience agreement. Repeatable (12).

HS 495 Independent Study (1-6 V)
As Needed.
Independent Study in the Health Sciences.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 498 Internship (1-12 V)
Fall, Spring, Summer.
Supervised experience with approved mentors in select health science settings. Activities include the completion of a major project, and other assignments. Minimum of 6 credit hours required for HS majors.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Completion of degree requirements. 2.5 GPA in the major. Internship Coordinator approval. Completion of Internship Agreement Form. Completion of HS 493 highly recommended before enrolling in this course. Repeatable (12).

HS 520 Advanced Evaluation of Health Issues 3(3-0)
As Needed.
Critically examines current health issues and their impact on individuals and communities including the ability to explain various viewpoints, make recommendations, and evaluate the fit of various solutions.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

HS 536 Community & Global Health Application 3(3-0)
As Needed.
The purpose of this course is the analysis and application of all aspects of community and global health, functions of health services at all levels, and the exploration of current and local health problems.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HS 594 Field Experience 1-12(0-45)
As Needed.
Supervised experiential learning activities to be conducted in the professional environment. Project and work experience must represent the Health Sciences field. Graduate level project and/or research required.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (12).

History (HIST)

HIST 110 World History to 1500 (GT-HI1) 3(3-0)
Fall, Spring.
Emergence of agricultural civilizations; political, economic, and social developments; growth of empires, trade, impact of geography, climate, disease; contact between Eurasia, Africa, Australasia, the Americas.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: HS, GT-HI1) (CC)

HIST 111 World History since 1500 (GT-HI1) 3(3-0)
Fall, Spring.
Columbian Exchange; growth of global empires, commerce, and international rivalries and cooperation; industrialization, spreading revolutions, the information age, and the emergence of the modern world.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: HS, GT-HI1) (CC)

HIST 136 (CS 136) The Southwest United States (GT-HI1) 3(3-0)
Fall, Spring.
This course traces the culture and historical development of the southwestern United States, including cultural contributions of the American Indian and Hispanic peoples.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: HS, GT-HI1) (CC)

HIST 201 U.S. History I (GT-HI1) 3(3-0)
Fall, Spring.
United States history from founding of North American colonies to 1877 Reconstruction era.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: HS, GT-HI1)

HIST 202 U.S. History II (GT-HI1) 3(3-0)
Fall, Spring.
United States from 1877 Reconstruction era to contemporary era.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: HS, GT-HI1)

HIST 250 Introduction to History for Majors 3(3-0)
Spring.
An introduction to the methods and concepts behind the study of history that history majors will use in their upper-level courses.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

HIST 291 Special Topics 1-3(1-3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (30).

HIST 295 Independent Study (1-3 V)
As Needed.
An individualized program of study designed by ranked, full-time History professor for a promising student.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

HIST 311 U.S. & Them: America in the World 3(3-0)
Spring, Odd.
From colonies to superpower, Americans' changing relationships with the world's other peoples, official and unofficial; war and peace, trade and embargo, policy and politics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 312 Colorado History 3(3-0)
Spring, Even.
History, government and economic factors important to the settlement and development of Colorado.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 330 Ancient Greece 3(3-0)
Spring, Even.
History of Greece from the Bronze Age to the Fourth Century B.C.E., emphasizing political, social, intellectual and cultural developments.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 333 Roman Republic 3(3-0)
Fall, Even.
History of the Roman Republic emphasizing the origin and expansion of Rome and its effect on political, social, intellectual and cultural developments.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 334 Roman Empire 3(3-0)
Spring, Odd.
History of the Roman Empire emphasizing political, social, economic and cultural developments.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 346 (CS 346) History of Mexico 3(3-0)
Spring, Even.
This course surveys the major political, economic, social and cultural developments of Mexico from pre-Columbian times to the present.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 352 Europe-Emergence, Empire, Evolution 3(3-0)
Spring, Even.
Survey of European history from late antiquity to the present; medieval period, Renaissance, Reformation, Enlightenment, Revolutions; modernity, extreme ideologies, World Wars, decolonization, steps to unification.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 362 History of Russia 3(3-0)
Fall, Odd.
Cultural and political development of Russian and Soviet history from 800 to the present; emphasis on impact of the Bolshevik Revolution on history.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 368 Blood, Tears & Glory: War & History 3(3-0)
Fall, Even.
How and why societies go to war, fight wars, and deal with the consequences. Provides a global view of military history emphasizing culture and combat.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 372 History Of Modern China 3(3-0)
Fall, Even.
Cultural and political developments in modern China; emphasis on the interplay between Chinese tradition and western challenges.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 395 Independent Study (1-3 V)
Fall, Spring, Summer.
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: None.
Corequisite: None.
Registration Information: Previous work in History. Permission of Instructor.

HIST 410 (LEGL 410) Creation of the US Constitution 3(3-0)
Spring, Odd.
Explores writing and ratification of U.S. Constitution.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 413 American West 3(3-0)
Fall, Odd.
Role of the individual and the group in the development of the frontier into the 20th century.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 414 The American Civil War 3(3-0)
Spring, Even.
Social, cultural, and political developments that caused the sectional crisis, secession, and war. War coverage includes military strategy, politics, diplomacy, and emancipation.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 415 (LEGL 415) Civil Rights 3(3-0)
Fall, Odd.
Survey from Reconstruction to Black Lives Matter; particular focus on judicial, presidential, legislative, and grassroots efforts to promote change.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 428 (SOC 428, WS 428) Women & Work 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Junior or senior standing. Permission of instructor.

HIST 432 (LEGL 432) Religion & Politics in US History 3(3-0)
Fall, Even.
Explores intersection of religion & politics in US history. Emphasis on 1st Amendment, particularly church and state. Will discuss meaning of the 1st Amendment, evolution, school prayer, rise of the religious right, KKK.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 445 Topics in the History of Empires 3(3-0)
Fall, Odd.
Comparative study of empires with in-depth analysis of specific topics and themes. Variable Content.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (9).

HIST 448 (LEGL 448) Roman Law 3(3-0)
Fall, Odd.
Uses case studies to explore developments in Roman legal procedure and consider both why these developments took place and how they helped to create a system of law that could be adapted in successive centuries.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 489 (CS 489) Borderlands 3(3-0)
Spring, Odd.
History of the Mexican cession to the U.S. from its Indian and Hispanic origins to the present.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 491 Special Topics 1-3(1-3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

HIST 493 Seminar 3(3-0)
Fall, Spring.
Seminar devoted to special topics and issues in history; emphasis on research paper.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 495 Independent Study (1-3 V)
Fall, Spring, Summer.
An individualized program of study designed by a ranked full-time Historian for a History major or minor.
Prerequisite: None.
Corequisite: None.
Registration Information: History major or minor. Permission of instructor.

HIST 498 Internship (3-6 V)
Fall, Spring, Summer.
For advanced students. Practical experience through internship with museums, libraries with historical collections, and other community organizations.
Prerequisite: None.
Corequisite: None.
Registration Information: History major or minor. Junior or senior standing. Permission of Department. Repeatable (6).

HIST 591 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

HIST 595 Independent Study (1-3 V)
Fall, Spring, Summer.
An individualized program of study designed by a ranked Historian.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of Graduate Director. Repeatable (6).

Honors (HONR)

A grade of C or better is required for prerequisite courses.

HONR 101 Foundations of Knowledge 2(2-0)
Fall, Spring.
Introductory seminar for the Honors Minor. Students explore interests and plan university experiences toward personal and professional goals post-graduation. Students also explore how knowledge is built across disciplines.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to Honors Program required.

HONR 201 Art and Science of Human Experience 2(2-0)
Spring.
Students are challenged to examine academic and professional approaches to evaluating human experience from the perspectives of art, humanities, social, behavioral, natural and applied sciences.
Prerequisite: HONR 101.
Corequisite: None.
Registration Information: Must be admitted to Honors program.

HONR 210 Honors Life Science and Technology 3(3-0)
As Needed.
A thematic, interdisciplinary, small-group seminar dealing with the aesthetic, cultural, historical, sociological and scientific aspects of life science and technology.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

HONR 220 Honors Health Issues 3(3-0)
As Needed.
A thematic, interdisciplinary, small-group seminar dealing with the aesthetic, cultural, historical, sociological and scientific aspects of life science and technology.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

HONR 230 Honors International & Economic Issues 3(3-0)
As Needed.
A thematic, interdisciplinary, small-group seminar dealing with aesthetic, cultural, historical, sociological, scientific aspects of international and economic issues.
Prerequisites: None.
Corequisites: None.
Registration Information: Must have complete 3 hours of Honors work.

HONR 240 Honors Physical Science 3(3-0)
As Needed.
A thematic, interdisciplinary, small-group seminar dealing with the aesthetic, cultural, historical, sociological, scientific and technological aspects of physical science.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

HONR 250 Honors Literary Themes 3(3-0)
As Needed.
A thematic, interdisciplinary, small-group seminar dealing with the aesthetic, cultural, historical, sociological and scientific aspects of literary themes.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

HONR 291 Special Topics-Honors (1-3 V)
As Needed.
Special Topics-Honors.
Prerequisites: None.
Corequisites: None.
Registration Information: Must be admitted to Honors Program. Repeatable (12).

HONR 310 Honors Group Project (1-3 V)
As Needed.
A cooperative learning experience project culminating in a presentation or similar product.
Prerequisites: None.
Corequisites: None.
Registration Information: Must be admitted to Honors Program.
Repeatable (99).

HONR 380 Honors Service-Learning (1-2 V)
As Needed.
Students will work with a community-based organization to "learn by doing" in an area relevant to their major to enhance learning and build civic responsibility.
Prerequisites: HONR 201.
Corequisites: None.
Registration Information: Must be admitted to Honors Program.
Repeatable (2).

HONR 481 Senior Honors Thesis/Project (1-3 V)
As Needed.
University Honors Program students enroll in this course to receive capstone credit. Senior seminar classes, capstone projects or other appropriate work is arranged by departments.
Prerequisites: HONR 310 and HONR 380.
Corequisites: None.
Registration Information: Must be admitted to Honors Program.
Repeatable (3).

HONR 491 Special Topics-Honors (1-3 V)
As Needed.
Special Topics-Honors.
Prerequisites: None.
Corequisites: None.
Registration Information: Must be admitted to Honors Program.
Repeatable (12).

Humanities & Social Sciences (HSS)

HSS 490 Special Projects (1-3 V)
Fall, Spring, Summer.
Individualized instruction within a special interest area, under supervision of the Humanities and Social Sciences Program coordinator.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Permission of instructor. Repeatable (6).

HSS 494 Field Experience (3,6 V)
Fall, Spring, Summer.
A semester-long internship. Student performs the professional duties required by the cooperating agency.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Permission of instructor. 3.0 GPA required. Repeatable (9).

HSS 499 Senior Capstone 3(1-2)
Fall, Spring, Summer.
In this course, students will complete and submit a portfolio, which is required for graduation from this degree program.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Permission of instructor.

Institute of Cannabis Research (ICR)

ICR 103 Introduction to Analytical Analysis of Cannabis 3(3-0)
As Needed.
This course will introduce students to the fundamental techniques used to quantify components of interest in the cannabis plant.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ICR 104 Agriculture & Cultivation of Cannabis 3(3-0)
As Needed.
This course is designed to provide a fundamental understanding of the plant biology of Cannabis. Students will learn the basics of cannabis cultivation and essential risk management strategies.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

ICR 106 Introduction to Cannabis Science & Research 1(1-0)
As Needed.
This course will introduce students to cannabis science and research as it is presented by academic experts in the fields of cannabis research and cultivation.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

Italian (ITL)

ITL 101 Beginning Italian I 3(3-0)
Fall, Spring, Even.
Development of skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

ITL 102 Beginning Italian II 3(3-0)
Fall, Spring, Even.
Continuation of the development of skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: ITL 101.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H) (CC)

ITL 201 Intermediate Italian I (GT-AH4) 3(3-0)
Fall.
Development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: ITL 102.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H, GT-AH4) (CC)

ITL 202 Intermediate Italian II (GT-AH4) 3(3-0)
Spring, Even.
Continued development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: ITL 201.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.
(Gen Ed: H, GT-AH4) (CC)

ITL 287 Intensive Italian Study Abroad (1-9 V)
As Needed.
Study of Italian in an immersion setting abroad, preparing the student for fluency through the study of grammar, civilization and culture, at an approved institution.
Prerequisite: ITL 102.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (9).

ITL 294 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: ITL 201.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (7).

ITL 295 Independent Study (1-3 V)
As Needed.
Focus on increasing linguistic proficiency through an independent project or agreed upon plan of study that relates to the Italian-speaking world.
Prerequisites: ITL 102.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (6).

ITL 301 Advanced Italian Grammar 3(3-0)
As Needed.
A concentrated study of Italian grammar in addition to practice in writing, reading, speaking, and listening.
Prerequisite: ITL 202.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.

ITL 312 Conv and Comp: Italian 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of Italian culture. (Culture, History, Literature, Art, Gastronomy, Current Events, etc).
Prerequisite: ITL 202.
Corequisites: None.
Registration Information: Advisor approval required for prerequisite equivalents.

ITL 341 Italian through Literature 3(3-0)
As Needed.
Focus on improving linguistic proficiency (reading, writing, listening and speaking) through the study of Italy's rich literary legacy.
Prerequisite: ITL 202.
Corequisites: None.
Registration Information: None.

ITL 351 Italian through Film 3(3-0)
As Needed.
Focus on improving linguistic proficiency (reading, writing, listening and speaking) through the study of Italian cinema.
Prerequisite: ITL 202.
Corequisites: None.
Registration Information: None.

ITL 381 Italian Civilization 3(3-0)
As Needed.
Focus on improving linguistic proficiency through the study of Italian geography, culture and history from the Roman Empire to the present.
Prerequisite: ITL 202.
Corequisites: None.
Registration Information: Permission of instructor.

ITL 387 Intensive Italian Study Abroad (1-12 V)
As Needed.
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: ITL 201.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

ITL 391 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: ITL 202.
Corequisites: None.
Registration Information: Repeatable (9).

ITL 394 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: ITL 202.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (7).

ITL 395 Independent Study (1-3 V)
As Needed.
Focus on increasing linguistic proficiency through an independent project or agreed upon plan of study that relates to the Italian-speaking world.
Prerequisites: ITL 202.
Corequisites: None.
Registration Information: Permission of instructor.

ITL 494 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: None.
Corequisites: None.
Registration Information: Two years of college Italian. Repeatable (99).

ITL 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

Library Archival Studies (LAS)

LAS 250 Academic Publishing 1(1-0)
Fall.
Introduction to the practices of the academic publishing industry, including products and formats, subscription models, professional ethics, the open access movement, and the industry's relationship with libraries.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

LAS 291 Special Topics 1(1-0)
Fall, Spring.
Special topics in library and archival studies.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

LAS 450 Library Publishing 1(1-0)
Spring.
This course provides students with meaningful experience in: 1) conducting and coordinating peer-review and editing of original research; and 2) disseminating and preserving original research according to best practices.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

LAS 491 Special Topics 1(1-0)
Fall, Spring.
Special topics in library and archival studies.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

LAS 498 Library and Archival Studies Internship 3(0.5-0.5)
As Needed.
Introduces students to the fundamentals of library and/or archival practice through readings and applied activities in a library or archival setting.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (6).

Management (MGMT)

MGMT 201 Principles of Management 3(3-0)
Fall, Spring, Summer.
Managerial process of planning, organizing, leading, decision-making, and controlling. Modern management techniques will be emphasized.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MGMT 214 Introduction to Entrepreneurial Concepts 3(3-0)
As Needed.
Introduction and exploration of entrepreneurship. Students will identify and articulate start up ideas in project activities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MGMT 224 Intro Agribusiness Entrepreneurship 3(3-0)
As Needed.
Introductory exposure to entrepreneurship for agribusinesses through presentations by industry professionals.
Prerequisite: ECON 202.
Corequisite: None.
Registration Information: None.

MGMT 291 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MGMT 301 Organizational Behavior 3(3-0)
Fall, Spring, Summer.
Team-work, individual and group behavior, motivation, work design, communication, decision-making, leadership, and organizational culture.
Prerequisite: MGMT 201.
Corequisite: None.
Registration Information: None.

MGMT 305 Agri and Res Enterprise Analysis 3(3-0)
As Needed.
Use of records in agricultural and resource enterprise management; analytical methods, budgets, and planning techniques for improved decision making.
Prerequisite: CIS 100 and CIS 103 and CIS 104 and ECON 202.
Corequisite: None.
Registration Information: None.

MGMT 311 Operations and Quality Management 3(3-0)
As Needed.
Managerial perspective of the operations and quality functions, use of analytical tools to solve operations and quality problems.
Prerequisite: BSAD 265 or MATH 156.
Corequisite: None.
Registration Information: None.

MGMT 314 Socially Responsible & Sustainable Enterprises 3(3-0)
As Needed.
Investigation of social entrepreneurship and sustainability practices. Students will create organizational plans balancing human needs, ecology and economy to launch organizations capable of producing an abundant future.
Prerequisite: MGMT 214.
Corequisite: None.
Registration Information: Approval of instructor.

MGMT 318 Human Resource Management 3(3-0)
Fall, Spring.
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.
Corequisite: None.
Registration Information: None.

MGMT 342 Water Law, Policy, and Institutions 3(3-0)
As Needed.
Legal water issues within the context of historical, social and economic development with emphasis on the southwestern United States.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MGMT 362 Purchasing and Materials Management 3(3-0)
As Needed.
Strategies and tactical methods, opportunities and problems associated with the flow of materials in an organization will be covered.
Prerequisite: MGMT 311.
Corequisite: None.
Registration Information: None.

MGMT 368 Project Management 3(3-0)
Fall, Spring.
Project planning, control, management and evaluation. Use of project planning software.
Prerequisite: MGMT 201.
Corequisite: None.
Registration Information: Junior standing.

MGMT 375 Agricultural Law 3(3-0)
As Needed.
Laws, regulations, case decisions affecting ranching and farming in the Rocky Mountain area.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MGMT 408 Agricultural Finance 3(3-0)
As Needed.
Monetary affairs of agribusiness and agricultural production emphasizing credit institutions and procurement, investment, and management.
Prerequisite: AREC 305.
Corequisite: None.
Registration Information: None.

MGMT 410 Labor Management Relations 3(3-0)
As Needed.
Federal and state legislation and executive orders governing the employer-employee relationship; legal rights of organizations and collective bargaining.
Prerequisite: MGMT 318.
Corequisite: None.
Registration Information: None.

MGMT 414 Entrepreneurship 3(3-0)
As Needed.
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: MKTG 340.
Corequisite: None.
Registration Information: None.

MGMT 460 Operations Strategy 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

MGMT 468 Quality Management 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

MGMT 471 Organization Theory and Design 3(3-0)
As Needed.
Evaluation of organizational design structures, measurement of system performance, and problems in design of adaptive systems.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. HSB majors only. Permission of advisor.

MGMT 475 International Management 3(3-0)
Fall, Spring.
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: FIN 330 and MGMT 301 and MKTG 340.
Corequisite: None.
Registration Information: None.

MGMT 478 Agricultural Policy 3(3-0)
As Needed.
Formulation and administration of public policies affecting agricultural industries and rural areas in the United States.
Prerequisite: ECON 202.
Corequisite: None.
Registration Information: None.

MGMT 480 Leadership & Organizational Change 3(3-0)
As Needed.
Integrative course that draws upon the business and leadership cores to explore practical ways in which to identify, evaluate, plan, and lead opportunities for organizational change.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MGMT 485 Strategic Management 3(3-0)
Fall, Spring.
Integration of the business core disciplines to explore ways that strategy is formed in contemporary business organizations. Case method used extensively.
Prerequisite: BSAD 360 and FIN 330 and MGMT 301 and MGMT 311 and MKTG 340.
Corequisite: None.
Registration Information: None.

MGMT 488 Sports Industry Management 3(3-0)
Spring.
Development of the sports industry; present state, and future trends in the field through the lenses of recreation, amateur and professional sport.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: Repeatable (99).

MGMT 490 Special Projects (1-6 V)
As Needed.
Special Projects.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

MGMT 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MGMT 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Must be HSB major. Permission of department chair. Repeatable (6).

MGMT 498 Internship (1-6 V)
As Needed.
Supervised field work in selected business, social and governmental organizations; supplemented by written reports.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Must be HSB major. Permission of internship coordinator. Repeatable (6).

MGMT 501 Fundamentals of Management 3(3-0)
As Needed.
This class familiarizes students with the managerial process and multiple specific topics related to the managerial function.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 505 Principles of Management 3(3-0)
As Needed.
Managerial process of planning, organizing, leading, decision-making, and controlling. Modern management techniques will be emphasized.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 511 Production/Operations Management 3(3-0)
Fall, Spring.
Managerial perspective of operations functions, under-standing of analytical tools to solve operations problems, applied operations issues, and develop decision-making skills.
Prerequisite: BSAD 265 or MATH 156 and MGMT 201.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 520 Management of Organizational Behavior 3(3-0)
Fall.
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: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 521 Theories of Organizational Design 3(3-0)
As Needed.
Identification of external environments faced by organizations and theories of organizational design that enable organizations to operate more effectively within their respective environments.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 540 Managing Human Resources 3(3-0)
As Needed.
A survey course covering the major areas of the management of human behavior in work organizations. Consideration given to aspects of strategic human resource management.
Prerequisite: MGMT 201.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 555 Wealth Building Enterprises 3(3-0)
As Needed.
Review of relevant contemporary literature, personal success definition, lifetime objectives and strategies to achieve those objectives. Seminar style. Emphasis on entrepreneurship.
Prerequisite: MGMT 201.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 568 Advanced Project Management 3(3-0)
As Needed.
This course focuses on advanced techniques, tools, and methods that organizations use to understand and successfully intervene in complex, systemic issues impacting an organization's ability to bring projects to fulfillment.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA/MEM or permission of MBA/MEM Director.

MGMT 575 International Management 3(3-0)
Fall, Spring, Summer.
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: BSAD 502 and MGMT 520.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 580 Negotiations (3 V)
Spring.
The course explores the psychology of bargaining & negotiation, interpersonal/inter-group conflict & its resolution. The focus is on critical negotiation, multiparty negotiation, international & cross-cultural differences.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MGMT 585 Management Policy & Strategy 3(3-0)
Fall, Spring, Summer.
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: MGMT 201.
Corequisite: None.
Registration Information: Must have completed MBA core. Admission to MBA. Permission of MBA Director.

MGMT 591 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.
Repeatable (6).

MGMT 595 Independent Study (1-3 V)
As Needed.
Individual study of a subject determined by the instructor and student with permission of the director.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.
Repeatable (6).

Marketing (MKTG)

MKTG 201 Introduction to Marketing 3(3-0)
As Needed.
Survey of marketing. Topics include: what is marketing, the effects of environment on marketing, segmenting markets and targeting customers, forces that shape purchasing behavior, the importance of research in marketing.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MKTG 291 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MKTG 340 Principles of Marketing 3(3-0)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: None.

MKTG 341 Sales Force Management 3(3-0)
As Needed.
Managing a sales force including recruiting, selection, training, compensation, supervision, stimulation & sales planning. Computer simulation used to do forecasting, budgeting, territory allocation, sales analysis & control.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: None.

MKTG 342 Promotional Strategy 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

MKTG 345 Retail Management 3(3-0)
As Needed.
Issues in buying, maintaining inventory, displaying, designing store layouts, promoting, providing services and general merchandising of products for improving retail profitability.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: None.

MKTG 348 Consumer Behavior 3(3-0)
As Needed.
Survey of contributions of behavioral sciences to understanding and prediction of consumer behavior in the decision-making process.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: None.

MKTG 388 Sports Industry Marketing 3(3-0)
Fall.
Introduce the various aspects of sports marketing, concentrating on the basic principles of sales, sponsorship, fan development, promotion, advertising and merchandising.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: Repeatable (99).

MKTG 410 Social Media and E-Marketing 3(3-0)
As Needed.
Detailed consideration of social media platforms and electronic marketing strategies. Planning executing, and monitoring online campaigns executed. Electronic Marketing theory discussed.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: None.

MKTG 440 Marketing Research 3(3-0)
As Needed.
Fundamental techniques. Practical experience in research methodology: planning an investigation, questionnaires, sampling, interpretation of results, report preparation.
Prerequisite: BSAD 265 and MKTG 340.
Corequisite: None.
Registration Information: None.

MKTG 441 Marketing Strategies 3(3-0)
As Needed.
Detailed consideration of process of formulating and implementing strategies in marketing. Major emphasis on markets, channels of distribution, and product analysis.
Prerequisite: BSAD 360 and MKTG 340.
Corequisite: None.
Registration Information: None.

MKTG 475 International Marketing 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

MKTG 490 Special Projects (1-6 V)
As Needed.
Special Projects.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MKTG 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MKTG 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MKTG 498 Internship (1-6 V)
As Needed.
Supervised field work in selected business, social and governmental organizations; supplemented by written reports.
Prerequisite: MKTG 340.
Corequisite: None.
Registration Information: Junior or senior standing. Must be HSB major. Permission of internship coordinator. Repeatable (6).

MKTG 501 Fundamentals of Marketing 1.5(1.5-0)
As Needed.
This class prepares students in the conception, promotion, pricing and distribution of ideas, goods, and services from a marketing perspective.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MKTG 505 Principles of Marketing 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MKTG 540 Marketing Management 3(3-0)
Fall, Spring, Summer.
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: MKTG 340.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director.

MKTG 561 Advertising & Promotion Research 3(3-0)
As Needed.
Advertising and Promotion research examines the effectiveness of alternative creative and channel strategies.
Prerequisite: MKTG 340.
Corequisite: MKTG 540.
Registration Information: Admission to MBA. Permission of MBA Director.

MKTG 575 International Marketing 3(3-0)
As Needed.
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 340.
Corequisite: MKTG 540.
Registration Information: Admission to MBA. Permission of MBA Director.

MKTG 591 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director. Repeatable (6).

MKTG 595 Independent Study (1-3 V)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to MBA. Permission of MBA Director. Repeatable (6).

Mathematics (MATH)

A grade of C or better is required for prerequisite courses.

MATH 091 Special Topics (1-4 V)
As Needed.
Special topics are offered to students in areas where regular course offerings are not available. This course does not count toward graduation.
Prerequisite: None.
Corequisite: None.
Registration Information: Satisfactory placement exam score. Repeatable (99).

MATH 096 College Prep Math 1 3(3-)
Fall, Spring.
Operations with real numbers. Solving and graphing linear equations with applications. Polynomial addition, subtraction, multiplication and division. This course does not count toward graduation.
Prerequisite: None.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.

MATH 097 College Prep Math 2 3(3-)
Fall, Spring.
Factoring polynomials, solving polynomial equations. Rational expressions and equations with applications. Inequalities and absolute value. Quadratic functions with applications. This course does not count towards graduation.
Prerequisite: MATH 096.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.

MATH 101 Introductory College Mathematics (GT-MA1) 3(3-0)
Fall, Spring, Summer.
Solving systems of linear equations. Introduction to functions. Operations with radical expressions. Solving radical equations. Exponential and logarithmic functions with applications.
Prerequisite: MATH 097.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.
(GT-MA1)

MATH 109 Mathematical Explorations (GT-MA1) (3 V)
Fall, Spring.
Emphasis on quantitative reasoning and problem solving. Topics chosen from: logic, sets, algebra, linear programming, probability, statistics, number theory, geometry, voting theory and graph theory.
Prerequisite: MATH 097.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.
(GT-MA1)

MATH 120 College Algebra (GT-MA1) 3(3-0)
Fall, Spring.
Solutions of algebraic equations, graphs of rational functions, exponential and logarithmic functions.
Prerequisite: MATH 101.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.
(GT-MA1)

MATH 122 College Trigonometry (3 V)
As Needed.
Trigonometric and circular functions, identities, inverse functions, vectors, complex numbers.
Prerequisite: MATH 120.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.

MATH 124 Pre-Calculus (GT-MA1) 5(5-0)
Fall, Spring.
Polynomial, rational, exponential and logarithmic functions; solution of systems of equations; trigonometric, circular and certain special functions.
Prerequisite: MATH 120.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.
(GT-MA1)

MATH 126 Calculus & Analytic Geometry I (GT-MA1) 5(5-0)
Fall, Spring.
Introduction to limits, continuity, differentiation and integration with selected applications.
Prerequisite: MATH 122 or MATH 124.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.
(GT-MA1)

MATH 156 Introduction to Statistics (GT-MA1) 3(3-0)
Fall, Spring, Summer.
Introduction to data analysis. Binomial and normal models. Sample statistics, confidence intervals, hypothesis tests, linear regression and correlation, and chi-square tests.
Prerequisite: MATH 101.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.
(GT-MA1)

MATH 191 Special Topics (1-5 V)
As Needed.
Special topics suitable for entry level math students.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor or department chair.
Repeatable (99).

MATH 207 Matrix and Vector Algebra with Applications 3(3-0)
Fall, Spring.
Systems of equations, matrices, inverses, determinants, eigenvalues and eigenvectors, scalar and cross-product, selected applications.
Prerequisite: MATH 124.
Corequisite: None.
Registration Information: None.

MATH 220 Quantitative Analysis for Business 4(4-0)
Fall, Spring, Summer.
An introduction to quantitative methods required for business studies, including linear programming, probability and statistics.
Prerequisite: MATH 101.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.

MATH 221 Applied Calc: An Intuitive Approach (GT-MA1) 4(4-0)
Fall, Spring.
Non-rigorous introduction to calculus with emphasis on applications and modeling in the life sciences, social and behavioral sciences and business.
Prerequisite: MATH 120.
Corequisite: None.
Registration Information: Satisfactory placement exam score or equivalent.
(GT-MA1)

MATH 224 Calculus and Analytic Geometry II 5(5-0)
Fall, Spring.
Differentiation and integration of transcendental functions, infinite sequences and series, parametric curves, and applications.
Prerequisite: MATH 126.
Corequisite: None.
Registration Information: None.

MATH 242 Introduction to Computation 4(3-2)
Spring.
Computer programming and computation with applications. Loops, conditionals, data types and structores, I/O, functions debugging, testing, and documentation. Numerical, graphical, symbolic computation issues and projects.
Prerequisite: MATH 126.
Corequisite: None.
Registration Information: None.

MATH 291 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor and approval of the department chair. Repeatable (99).

MATH 295 Independent Study (1-5 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MATH 307 Introduction to Linear Algebra 4(4-0)
Spring.
A rigorous development of vector spaces and linear transformations.
Prerequisite: MATH 207 or MATH 224.
Corequisite: None.
Registration Information: None.

MATH 319 Number Theory (3 V)
Spring, Odd.
Divisibility, prime numbers, linear congruences, multiplicative functions, cryptology, primitive roots, and quadratic residues.
Prerequisite: MATH 224.
Corequisite: None.
Registration Information: None.

MATH 320 Introductory Discrete Mathematics 3(3-0)
Fall.
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: MATH 224.
Corequisite: None.
Registration Information: None.

MATH 325 Intermediate Calculus 4(4-0)
Fall.
Continuation of MATH 224. Vector valued functions and multivariable calculus.
Prerequisite: MATH 224.
Corequisite: None.
Registration Information: None.

MATH 330 Introduction to Higher Geometry (3 V)
Spring, Even.
Euclidean, hyperbolic, finite, and transformation geometries, models, and constructions.
Prerequisite: MATH 224.
Corequisite: None.
Registration Information: Permission of instructor.

MATH 337 Differential Equations I 3(3-0)
Spring.
First order differential equations, homogeneous and non-homogenous linear differential equations, introduction to the Laplace transform, applications.
Prerequisite: MATH 224.
Corequisite: None.
Registration Information: None.

MATH 338 Differential Equations II 3(3-0)
Fall, Odd.
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: MATH 337.
Corequisite: None.
Registration Information: MATH 325 is recommended as prerequisite.

MATH 342 Introduction to Numerical Analysis 3(3-0)
Spring, Even.
Numerical solutions of polynomial, differential, integral, and other equations using the computer.
Prerequisite: MATH 224.
Corequisite: None.
Registration Information: Programming language recommended. Permission of instructor.

MATH 345 Algorithms & Data Structures 4(3-2)
Spring, Odd.
An introduction to data structures, sorting, searching, recurrence relations and performance measures. Algorithms will be studied analytically and through computer implementation.
Prerequisite: MATH 224 and MATH 242.
Corequisite: None.
Registration Information: None.

MATH 350 Probability 3(3-0)
Spring.
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.
Corequisite: None.
Registration Information: None.

MATH 356 Statistics for Engineers & Scientists 3(3-0)
Fall.
Calculus-based introduction to statistical methods. Sampling distributions, hypothesis testing, linear regression, design of experiments using ANOVA. Data analysis with Minitab.
Prerequisite: MATH 350.
Corequisite: None.
Registration Information: None.

MATH 360 Elementary Mathematics Concepts I 3(3-0)
Fall.
Development of the real number system and related concepts, including sets, numeration systems, whole numbers, integers, number theory and algorithms.
Prerequisite: None.
Corequisite: None.
Registration Information: MATH 101 or MATH 109 recommended as prerequisite. Satisfactory placement score.

MATH 361 Elementary Mathematics Concepts II 3(3-0)
Spring.
Conceptual development of fractions, rational numbers, geometry, measurement, probability and statistics.
Prerequisite: MATH 360.
Corequisite: None.
Registration Information: Satisfactory placement score.

MATH 362 Problem Solving for K-6 Teachers 3(3-0)
Fall.
This course focuses on the process of mathematical problem solving. Students will develop and implement useful heuristics, and reflect on problem solving strategies.
Prerequisite: MATH 361.
Corequisite: None.
Registration Information: Liberal Studies General Education Mathematics requirement met.

MATH 411 Introduction to Topology 3(3-0)
As Needed.
An introduction to topological spaces, homeomorphisms, topological properties, and separation axioms.
Prerequisite: MATH 319 or MATH 320 or MATH 330.
Corequisite: None.
Registration Information: None.

MATH 421 Introduction to Analysis 4(4-0)
Spring.
An introductory course in real analysis providing a rigorous development of the concepts of elementary calculus.
Prerequisite: MATH 319 or MATH 320 or MATH 330 and MATH 325.
Corequisite: None.
Registration Information: None.

MATH 425 Complex Variables 3(3-0)
Fall, Even.
An introduction to complex function theory. Complex numbers, sequences and series, the calculus of complex functions, analytic functions, and conformal mappings.
Prerequisite: MATH 325.
Corequisite: None.
Registration Information: None.

MATH 427 Abstract Algebra 4(4-0)
Fall.
Introduction to groups, rings and fields and their elementary properties.
Prerequisite: MATH 307 and MATH 319 or MATH 320 or MATH 330.
Corequisite: None.
Registration Information: None.

MATH 442 Machine Learning for Data Analytics 3(2-2)
As Needed.
Implementation of algorithms for supervised and unsupervised learning, to include linear/logistic regression, random forests, naïve Bayes, neural networks, clustering, support vector machines, hidden markov models.
Prerequisite: MATH 242.
Corequisite: None.
Registration Information: None.

MATH 445 Discrete Mathematics 3(3-0)
As Needed.
Topics selected from mathematical reasoning, combinatorial techniques, set theory, binary relations, functions and sequences, algorithm analysis, and discrete analysis.
Prerequisite: MATH 224 and MATH 307.
Corequisite: None.
Registration Information: Knowledge of a programming language.

MATH 463 History of Mathematics 3(3-0)
Fall, Odd.
Survey of the origins of important mathematical concepts and of the mathematicians responsible for these discoveries.
Prerequisite: MATH 319 or MATH 320 or MATH 330.
Corequisite: None.
Registration Information: None.

MATH 477 Methods for Teaching Secondary Math 4(3-2)
Fall, Even.
Topics and issues in secondary mathematics education, including materials development, learning theories, instructional and assessment strategies, curriculum, planning and standards. Sixty hours field experience required.
Prerequisite: MATH 319 or MATH 320 or MATH 330.
Corequisite: None.
Registration Information: Acceptance into Teacher Education Program.

MATH 480 Tutoring Practicum (1-2 V)
As Needed.
Participation in tutoring mathematics in the MLC under the guidance of the MLC Director.
Prerequisite: MATH 224.
Corequisite: None.
Registration Information: Permission of Math Learning Center Director. Repeatable (2).

MATH 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MATH 492 Research (1-3 V)
As Needed.
Research project selected by student and supervised by a regular mathematics faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Approval of department. Repeatable (99).

MATH 493 Seminar (1-3 V)
As Needed.
Seminar.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Permission of instructor. Repeatable (99).

MATH 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Permission of instructor. Repeatable (99).

MATH 498 Internship (1-6 V)
As Needed.
Work experience using the discipline of mathematics under the direction of the selected organization and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Permission of department chair. Repeatable (99).

MATH 501 Foundations of Mathematics 3(3-0)
As Needed.
Sets, logic, axiomatics, mappings and the various sub-systems of the reals for beginning graduate students.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MATH 507 Linear Algebra 3(3-0)
As Needed.
Vector spaces, linear transformations, matrix representation, canonical form.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MATH 521 Intermediate Analysis 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Permission of instructor.

MATH 527 Abstract Algebra 3(3-0)
As Needed.
Groups, rings, integral domains, quotient rings, ideals, fields, homomorphisms and related topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MATH 530 Advanced Geometry 3(3-0)
As Needed.
Foundations of geometry, geometric transformations, and applications.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MATH 550 Statistical Methods 3(3-0)
As Needed.
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.
Corequisite: None.
Registration Information: None.

MATH 556 (EN 556) Design & Analysis of Experiments 3(3-0)
Summer.
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 MATH 356.
Corequisite: None.
Registration Information: None.

MATH 577 Concepts in Secondary School Mathematics (1-4 V)
As Needed.
Problems of teaching secondary school mathematics; the slow learner, methods, gifted students, evaluation.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MATH 591 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

MATH 595 Independent Study (1-2 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

MATH 598 Graduate Internship (1-4 V)
As Needed.
Volunteer or paid work experience under the combined supervision of the selected organization and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

MATH 599 Thesis Research (1-6 V)
As Needed.
Thesis Research.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

Media & Entertainment (MAE)

A grade of C or better is required for prerequisite courses.

MAE 100 College & Career Success (GT-SS3) 1(0-2)
Fall.
Students are introduced to, and become familiar with, processes, resources, and strategies to help them succeed in their individual career fields.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

MAE 101 Media & Society (GT-SS3) 3(3-0)
Fall, Spring.
Survey course that examines the historical, sociological, economic, technological, and ethical foundations of mediated communication from a social scientific perspective.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: SS, GT-SS3)

MAE 140 Introduction to Film 3(3-0)
Spring.
Provides an introduction to the study of film as an art form and a medium of cultural communication. It is a survey of the major developments, movements, and critical approaches in cinema.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 210 Hispanic, Chicanx, & Indigenous Media 3(3-0)
As Needed.
The historical and cultural implications of the mass media's portrayal of Hispanic, Chicanx, and Indigenous communities and the extent of their media participation from colonial to contemporary times.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 211 (WS 211) Women & Media 3(3-0)
Fall.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

MAE 217 (PSYC 217, WS 217) Women & Society 3(3-0)
As Needed.
Statistical overview of the current status of women, followed by examination of theories concerning equality of the sexes.
Prerequisite: PSYC 100.
Corequisite: None.
Registration Information: None.

MAE 220 Professional Media Writing 3(3-0)
Fall, Spring.
A foundational course examining professional fact-finding, reporting and writing techniques across the primary forms of media (print, broadcast, and online).
Prerequisite: ENG 101.
Corequisite: None.
Registration Information: Permission of instructor.

MAE 230 Sound, Radio, & Podcasting Essentials 3(3-0)
Fall, Spring.
An introductory course examining audio technology and recording techniques as they apply to radio and podcasting production. Students receive instruction and hands-on experience utilizing professional-grade studio equipment.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 240 Film & Video Essentials 3(3-0)
Fall, Spring.
An introductory video course designed to provide students with an overview of field and studio production including terminology, positions, cameras, lighting, editing, and distribution.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 250 Media Design Essentials 3(3-0)
As Needed.
An introduction to professional media design concepts and techniques using industry-standard raster, vector, and layout software to achieve visual design objectives for print and digital media.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

MAE 251 Gaming & Immersive Media Essentials 3(3-0)
As Needed.
An introduction to gaming and interactive technologies and platforms through hands-on experience with fundamental coding for websites, gaming, immersive, and interactive media.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MAE 301 Theories & Research in Media 3(3-0)
As Needed.
Application of theories to mass communication and media problems. Nature of the communication process in groups and between mass media and audiences. Contribution of theoretical concepts to solving specific problems.
Prerequisite: MAE 101.
Corequisite: None.
Registration Information: Permission of instructor.

MAE 302 Audience Research & Advertising 3(3-0)
As Needed.
This course examines audience research methods and how advertisers plan and buy across media platforms to reach their target audience.
Prerequisite: MAE 101.
Corequisite: None.
Registration Information: None.

MAE 305 Scriptwriting 3(3-0)
As Needed.
Various short-form and long-form scriptwriting styles and standards are introduced for radio, podcasting, television, streaming, and film.
Prerequisite: ENG 101.
Corequisite: None.
Registration Information: Permission of instructor.

MAE 306 Performance & Acting 3(3-0)
As Needed.
Students learn how to use their voice and image effectively across a variety of productions. Content focuses on performance and acting using the voice, body, and image across sound, film, and stage productions.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 310 Evolution of Media & Creative Technologies 3(3-0)
As Needed.
From the first printing press to deep learning smart machines, this class explores the evolution of media and technologies as they relate to message delivery and creative expression.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 311 Gender & Film 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: None.

MAE 320 Reporting & Copy Writing 3(3-0)
As Needed.
Students further hone their reporting, interviewing, editing and writing skills across a range of media through hands-on experience in multimedia storytelling.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: MAE 230 and MAE 240 and MAE 250 highly recommended prerequisites, but may be taken concurrently.

MAE 321 Data Journalism & Visualization 3(3-0)
As Needed.
Students grow their data mining and investigative skills and their understanding of the importance of visual communication across media, introductory photojournalism and graphic creation.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: MAE 230 and MAE 240 highly recommended prerequisites, but may be taken concurrently.

MAE 322 Photojournalism 3(3-0)
As Needed.
Students are introduced to photography as a journalistic medium and hone their skills as visual storytellers across print and digital media.
Prerequisite: MAE 220 and MAE 250.
Corequisite: None.
Registration Information: None.

MAE 330 Sound Recording & Technology 3(3-0)
As Needed.
Multitrack recording and production concepts relevant to the role of a sound engineer are explored. Topics include microphone theory, consoles, technical standards, dynamic processing, effects, and digital audio theory.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: MAE 220 and MAE 240 and MAE 250 highly recommended prerequisites, but may be taken concurrently.

MAE 332 Critical Listening & Analysis 3(3-0)
As Needed.
This course is designed to provide students with the requisite theory and practical experience in applying listening and analytical skills to professional works of sound from the perspective of the sound engineer.
Prerequisite: MAE 230.
Corequisite: None.
Registration Information: None.

MAE 333 Live Sound Reinforcement 3(3-0)
As Needed.
An introduction to the theory, equipment, and management of live sound. Topics include sound reinforcement system technology, installation and operation, stage types, installation techniques, and design consideration.
Prerequisite: MAE 230.
Corequisite: None.
Registration Information: None.

MAE 334 Electronic Music, MIDI, & Synthesis 3(3-0)
As Needed.
Students explore the fundamental principles and application of MIDI and audio synthesis as a foundation for beat-making, music, and sonic art.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 335 Advanced Radio & Podcasting 3(3-0)
As Needed.
Advanced study and application of the theories and techniques used in the production cycle. Students engage in the recording, editing and production of advanced multi-track sessions as it applies to radio and podcasting.
Prerequisite: MAE 230.
Corequisite: None.
Registration Information: None.

MAE 340 Advanced Film & Video Production 3(3-0)
As Needed.
Advanced study and application of the theories and techniques used in the production of film and video. Students expand their skill set and are required to critically research and effectively produce high quality productions.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: MAE 220 and MAE 230 and MAE 250 highly recommended prerequisites, but may be taken concurrently.

MAE 341 Film & Video Post Production 3(3-0)
As Needed.
This course focuses on post-production for video and film with an emphasis on advanced editing techniques, effects, color, and professional delivery formats using non-linear editing software and equipment.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: MAE 220 and MAE 230 and MAE 250 highly recommended prerequisites, but may be taken concurrently.

MAE 350 Media Design & Layout 3(3-0)
As Needed.
Advanced media design concepts and techniques are explored and integrated into professional digital and print media using industry standard raster, vector, and layout software and technology.
Prerequisites: MAE 250.
Corequisites: None.
Registration Information: None.

MAE 351 Web Design & Development 3(3-0)
As Needed.
A comprehensive overview of website development through hands-on development of an interactive website.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 352 Game Design & Development I 3(3-0)
As Needed.
This project-based course explores the fundamental concepts of game design and development. Students work individually and in teams to design, implement and test a game.
Prerequisite: MAE 250 and MAE 251.
Corequisite: None.
Registration Information: None.

MAE 355 Commercial & Creative Imaging 3(3-0)
As Needed.
Photographic techniques and workflow for commercial and creative outlets are explored, including framing, editing, and preparation for digital and print media.
Prerequisites: MAE 250.
Corequisites: None.
Registration Information: None.

MAE 356 Digital Media Illustration 3(3-0)
As Needed.
An exploration of digital illustration techniques using vector and raster-based software to create original works for digital and print media.
Prerequisites: MAE 250.
Corequisites: None.
Registration Information: None.

MAE 360 Sports Reporting 3(3-0)
As Needed.
A specialized advanced journalism course addressing the interpretation and reporting of sports-based stories, information, and statistics to create professional sports articles and multimedia packages.
Prerequisite: MAE 320.
Corequisite: None.
Registration Information: None.

MAE 361 Sportscasting & Gameday Announcing 3(3-0)
As Needed.
This course examines the role of the sportscaster, shoutcaster, public address announcers, and sports information directors. Students learn and practice and how to execute a successful performance for various media.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: MAE 220 and MAE 240 and MAE 250 highly recommended prerequisites, but may be taken concurrently.

MAE 370 Social Media & Online Strategies 3(3-0)
As Needed.
An overview of social media and online platforms examining current technologies, trends, production and distribution strategies, consumption, data analysis, and ethical considerations.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 371 Public Relations 3(3-0)
As Needed.
Overview of public relations theories, strategies, and practices. Students learn how to construct strategic content using writing, images, video, and audio to message and deliver to various publics across platforms.
Prerequisite: MAE 220.
Corequisite: None.
Registration Information: MAE 230 and MAE 240 and MAE 250 highly recommended prerequisites.

MAE 372 Branding & Advertising 3(3-0)
As Needed.
Theories and strategies of branding, advertising planning, media techniques, marketing posture, and creative media buying are explored through hands-on application.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: None.

MAE 380 The Business of Media, Entertainment, & the Arts 3(3-0)
As Needed.
This course explores the business aspects and management functions unique to creative and arts-based organizations and individuals.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 381 Creative Careers & Talent Management 3(3-0)
As Needed.
Business, legal, and psychological strategies and practices are explored from the manager and artist-creator perspectives as they relate to managing creative careers.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: None.

MAE 382 Concerts, Festivals, & Events 3(3-0)
As Needed.
This course covers legal, commercial, business, and managerial aspects of domestic and international live entertainment events, with an emphasis on concerts and festivals.
Prerequisite: MAE 101 and MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: None.

MAE 401 Law, Ethics, & Regulation of Media 3(3-0)
As Needed.
This course examines the laws, regulations, and ethical considerations of media and entertainment industries in the United States.
Prerequisite: MAE 101.
Corequisite: None.
Registration Information: Permission of instructor.

MAE 405 Screenwriting 3(3-0)
As Needed.
An advanced course on script writing across genres for long-form productions.
Prerequisite: ENG 101 and MAE 240.
Corequisite: None.
Registration Information: None.

MAE 420 Advanced Reporting 3(3-0)
As Needed.
Journalism and storytelling is perfected through advanced application and practice of AP and broadcast writing styles, copy editing, and multimedia production across a variety of beats and features.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250 and MAE 320.
Corequisite: None.
Registration Information: None.

MAE 421 Public Affairs & Political Reporting 3(3-0)
As Needed.
Students delve into the world of political reporting, covering debates, keeping up with breaking news from the political campaign and presenting multimedia stories in a fair and balanced manner.
Prerequisite: MAE 230 and MAE 240 and MAE 250 and MAE 320.
Corequisite: None.
Registration Information: None.

MAE 422 Community Journalism 3(3-0)
As Needed.
Students explore the role that media plays in the maintenance of a fiscally and culturally healthy community. Special emphasis will be placed on the ethical responsibilities of hyper-local, community-centric media.
Prerequisite: MAE 230 and MAE 240 and MAE 250 and MAE 320.
Corequisite: None.
Registration Information: None.

MAE 430 Sound Recording, Mixing, & Mastering 3(3-0)
As Needed.
Multitrack record, mix, & master are explored. Concepts such as single/multiband compression & limiting equalization, effects, pitch-correction, MIDI implementation, & corrective techniques implemented at advanced level.
Prerequisites: MAE 330.
Corequisites: None.
Registration Information: None.

MAE 431 Sound for Picture 3(3-0)
As Needed.
This course focuses on location & studio multitrack sound production techniques for television, streaming, & film. Topics include location & field recording, music selection, Foley, ADR, mixing, surround sound, & sync.
Prerequisite: MAE 230.
Corequisite: None.
Registration Information: None.

MAE 434 Immersive & Game Sound Design 3(3-0)
As Needed.
An advanced sound course that explores the theoretical and applied aspects of sound in video games through conceptualization, recording, mixing, and integration into immersive environments.
Prerequisite: MAE 230.
Corequisite: None.
Registration Information: None.

MAE 440 Multi Camera Production 3(3-0)
As Needed.
An advanced production course focusing on multi camera live production terminology, roles, techniques, and practice.
Prerequisite: MAE 240.
Corequisite: None.
Registration Information: MAE 220 and MAE 230 and MAE 250 strongly recommended before or concurrently.

MAE 441 Directing & Producing 3(3-0)
As Needed.
Students learn the complex roles and responsibilities of the producer and director in media productions.
Prerequisite: MAE 240.
Corequisite: None.
Registration Information: MAE 220 and MAE 230 and MAE 250 strongly recommended before or concurrently.

MAE 442 Documentary Film Production 3(3-0)
As Needed.
Advanced production course about non-fiction formats. The course combines theory, history, and production aesthetics specific to television documentary with the opportunity to produce a documentary.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250 and MAE 341.
Corequisite: None.
Registration Information: None.

MAE 443 Narrative Film Production 3(3-0)
As Needed.
Advanced production course about narrative film formats. This course combines theory, techniques, methods, and production aesthetics specific to narrative film.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250 and MAE 341.
Corequisite: None.
Registration Information: None.

MAE 452 Game Design & Development II 3(3-0)
As Needed.
This project-based course expands on the concepts of game design and development. Students design a game using advanced multimedia assets, game theory, and coding.
Prerequisite: MAE 352.
Corequisite: None.
Registration Information: Permission of instructor.

MAE 460 Sports & Esports Production 3(3-0)
As Needed.
This course focuses on sports and esports production techniques, technologies, workflow, and roles. Students learn how to produce a sports-based event from pre-production to gameday to post-mortem review and critique.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisite: None.
Registration Information: None.

MAE 470 Image & Influencers 3(3-0)
As Needed.
This course focuses on image brand management and strategies for developing an influential presence online. Emphasis is placed on the practical application of multimedia image branding content across social platforms.
Prerequisite: MAE 370.
Corequisite: None.
Registration Information: None.

MAE 471 Crisis Communications 3(3-0)
As Needed.
This course focuses on crisis and issues management from a strategic communications approach. Emphasis is placed on practical application of crisis communications theory and real-life case studies.
Prerequisite: MAE 370.
Corequisite: None.
Registration Information: None.

MAE 472 Nonprofit Organizations & Communication 3(3-0)
As Needed.
Strategic communication theory and techniques are used to examine the basic elements of nonprofit organizations from economic, political, and social perspectives.
Prerequisite: MAE 370.
Corequisite: None.
Registration Information: None.

MAE 475 Strategic Communication Campaigns 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: None.

MAE 480 Copyright, Licensing, & Publishing 3(3-0)
As Needed.
Course presents a historical and legal context necessary for understanding intellectual property rights in the media, entertainment, and arts industries.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 490 Special Projects (1-3 V)
As Needed.
Special Projects affords students the opportunity to concentrate for a semester on the intensive production of a professional, tangible product.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

MAE 491 Special Topics (1-3 V)
As Needed.
Special Topics allows students to explore a specific theme or issue in the field of media and entertainment.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

MAE 492 Capstone: Research & Proposal 2(2-0)
Fall, Spring.
The first of two capstone courses, students conceptualize and defend a final capstone project proposal supported by research and influenced by aspirations, skills and abilities, and purpose.
Prerequisites: MAE 220 and MAE 230 and MAE 240 and MAE 250.
Corequisites: None.
Registration Information: None.

MAE 493 Seminar (1-3 V)
As Needed.
This course introduces topics in a seminar format that are not offered as part of the standard curriculum.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MAE 494 Field Experience (1-3 V)
As Needed.
Experiential learning opportunity provided by an organization with a mentoring component.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

MAE 495 Independent Study (1-3 V)
As Needed.
This course provides an opportunity for the student who wishes to undertake a well-defined, independent project under the guidance of a faculty member of his or her own choosing.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

MAE 498 Internship (1-3 V)
As Needed.
Provides professional experience in a variety of media and entertainment environments, including large corporations, media outlets, educational institutions, non-profit agencies and others.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

MAE 499 Capstone: Production & Delivery 2(2-0)
As Needed.
Students demonstrate proficiency in their field(s) through the production, presentation, distribution, and critique of their capstone project and paper. Students refine and prepare their portfolios and resumes.
Prerequisite: MAE 220 and MAE 230 and MAE 240 and MAE 250 and MAE 492.
Corequisite: None.
Registration Information: None.

Military Science & Leadership (MSL)

A grade of C or better is required for prerequisite courses.

MSL 101 Leadership and Personal Development 3(2-2)
Fall, Even.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Field work required once a week.

MSL 102 Introduction to Tactical Leadership 3(2-2)
Spring, Even.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Field work required once a week.

MSL 201 Innovative Team Leadershp 3(2-2)
Fall, Even.
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. Prerequisite: None.
Corequisite: None.
Registration Information: Field work required once a week.

MSL 202 Foundations of Tactical Leadership 3(2-2)
Spring, Even.
Examines the challenges of leading tactical teams in the contemporary operating environment (COE). Highlights terrain analysis, operation orders and adaptive leadership.
Prerequisite: None.
Corequisite: None.
Registration Information: Field work required once a week.

MSL 301 Adaptive Tactical Leadership 3(2-2)
Fall, Even.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Field work required once a week and physical training required three times per week. ROTC Basic Course Credit.

MSL 302 Leadership in Changing Environmens 3(2-2)
Spring, Even.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Field work required once a week and physical training required three times per week. ROTC Basic Course Credit.

MSL 303 Advanced Camp 6(0-12)
Summer, Even.
Students are assigned to a unit, placed in leadership positions, and evaluated on how they work in that unit.
Prerequisite: MSL 301 and MSL 302.
Corequisite: None.
Registration Information: Mandatory for Advanced Course ROTC students.

MSL 401 Developing Adaptive Leaders 3(2-2)
Fall.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Field work required once a week. Physical training required three times per week. ROTC Basic Course Credit.

MSL 402 Leadership in a Complex World 3(2-2)
Spring, Even.
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).
Prerequisite: None.
Corequisite: None.
Registration Information: Field work once weekly. Physical training required three times per week. ROTC Basis Course Credit.

MSL 485 Special Studies in Leadership 1(1-0)
Fall, Spring, Even.
Course for students participating in the Army ROTC Advanced Course that want to pursue further studies in military leadership and group dynamics.
Prerequisite: None.
Corequisite: None.
Registration Information: By arrangement with professor of Military Science only. Repeatable (99).

Music (MUS)

MUS 100 Music Fundamentals I: Notation 2(2-0)
As Needed.
An overview of the basic elements and principles of music notation and their application to performance.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 101 Music Performance Symposium I (1 V)
Fall, Spring.
Level one course in observation and critique of music performances, includes lectures, clinics, demonstrations, and performance preparation.
Prerequisite: None.
Corequisite: None.
Registration Information: Weekly critiques required for credit. Repeatable (2).

MUS 103 Music and Computer Technology I 1(1-0)
Fall, Spring.
Introduction to the use of computer technology in music, including digital audio, MIDI, composing, sequencing, performing, and printing, utilizing various software applications.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MUS 105 Music Fundamentals & Foundations 3(3-0)
As Needed.
A study of the basic principles of music theory relating to musical composition. Prepares students for success in the Music Theory sequence and creative industries.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 110 Music and Audio Production I 2(2-0)
Fall, Spring.
Introduces principals of music and audio recording, editing, mixing and mastering using computer-based Digital Audio Workstation software.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of Instructor.

MUS 113 Vocal Techniques and Diction 1(0-2)
Fall, Spring.
Instruction in the fundamentals of singing from a pedagogical approach. Additional basic instruction in foreign language pronunciation.
Prerequisite: None.
Corequisite: None.
Registration Information: Primarily intended for students in Music Education.

MUS 118 Music Appreciation (GT-AH1) 3(3-0)
Fall, Spring.
Significant musical compositions, composers and historical eras; analysis and description of music forms and terms; includes women composers and multi-cultural issues.
Prerequisite: None.
Corequisite: None.
Registration Information: None.
(Gen Ed: H, GT-AH1) (CC)

MUS 120 History of Jazz 2(2-0)
As Needed.
Study of historical trends and developments in jazz, including significant performers, styles, composers, and compositions.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 125 Piano Class for Non-Majors 1(0-2)
Fall, Spring.
An elective course for the piano beginner or intermediate player who wishes to increase personal skill at the keyboard.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (2).

MUS 127 Functional Piano I: Beginning 1(0-2)
Fall, Spring.
For students with no piano experience. Introduces fundamentals, with emphasis on providing skills necessary for successful completion of the Proficiency Exam.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (2).

MUS 130 Guitar Class 1(0-2)
As Needed.
Basic instruction in guitar technique in a group setting. Application of both melodic and chordal (rhythmic) media.
Prerequisite: None.
Corequisite: None.
Registration Information: Primarily for the non-music major/minor. Repeatable (99).

MUS 150 Music Theory I 3(3-0)
Fall.
A comprehensive review of all music theory fundamentals leading to diatonic harmony and four-part writing based on 18th century "common practice".
Prerequisite: None.
Corequisite: None.
Registration Information: Advisor approval required for satisfactory completion of theory placement examination in place of prerequisite.

MUS 151 Aural Skills I 2(1-2)
Spring.
Development of basic aural skills, including diatonic harmony, interval recognition, singing at sight, error detection, and rhythmic, melodic, and harmonic discriminatory listening.
Prerequisite: None.
Corequisite: None.
Registration Information: MUS 210 strongly recommend as corequisite.

MUS 152 Jazz Improvisation I 2(2-0)
Fall.
Introduction to theory and techniques of improvisation in various styles of jazz. Includes developing familiarity with various representative jazz artists.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of Instructor. Repeatable (6).

MUS 160 Applied Violin, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of Instructor. Repeatable (99).

MUS 161 Applied Viola, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of Instructor. Repeatable (99).

MUS 162 Applied Cello, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 163 Applied Bass, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 164 Applied Flute, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 165 Applied Oboe, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 166 Applied Bassoon, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 167 Applied Clarinet, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 168 Applied Saxophone, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 169 Applied Voice, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 170 Applied Trumpet, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 171 Applied French Horn, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 172 Applied Trombone, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 173 Applied Euphonium, Non-Major (1-2 V)
As Needed.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 174 Applied Tuba, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 175 Applied Percussion, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 176 Applied Piano, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 177 Applied Organ, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 178 Applied Classical Guitar, Non-Major (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 179 Applied Jazz/Comm. Guitar Non-Maj (1-2 V)
Fall, Spring.
Applied music study in various performance areas for the non-music major. Weekly lesson arranged with the instructor.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 180 Introduction to Composition 1(1-0)
Fall, Spring, Summer.
Introductory course to the processes of musical composition, emphasizing chamber works and consideration of form.
Prerequisite: MUS 150 and MUS 151.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 201 Music Performance Symposium II (1 V)
Fall, Spring.
Level two course in observation and critique of music performances; includes lectures, clinics, demonstrations, and performance preparation.
Prerequisite: MUS 101.
Corequisite: None.
Registration Information: Weekly critiques required for credit. Repeatable (2).

MUS 202 Concert Choir (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the choral ensemble.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performances are required. Permission of instructor. Repeatable (6).

MUS 203 Electronic Music 2(1-2)
As Needed.
In-depth study of and experiences with a variety of electronic music hardware and software. Includes sound recording and engineering practices.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

MUS 204 Collaborative Music Ensemble (0.5-1 V)
As Needed.
Ensemble specializing in small chamber works for piano, winds, strings, in various combinations.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MUS 207 University Band (0.5-1 V)
Spring.
Provides a Concert Band performing opportunity for students from all disciplines across campus.
Prerequisite: None.
Corequisite: None.
Registration Information: Director approval. Repeatable (6).

MUS 208 Vocal Jazz Ensemble (0.5-1 V)
Fall, Spring.
Secondary music ensemble specializing in the rehearsal, study, and public performance of appropriate vocal jazz ensemble literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities required. Permission of instructor. Repeatable (6).

MUS 209 Chamber Choir (0.5-1 V)
Fall, Spring.
Primary ensemble for vocal majors specializing in the rehearsal, study, and public performance of advanced choral literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities required. Permission of instructor. Repeatable (6).

MUS 210 Music Theory II 3(3-0)
Spring.
A continuation of MUS 150 with further development of diatonic harmony, four-part writing skills, diatonic modulation, and analysis of appropriate representative literature.
Prerequisite: MUS 150.
Corequisite: None.
Registration Information: MUS 151 strongly recommended as corequisite.

MUS 211 Aural Skills II 2(1-2)
Fall.
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: MUS 151.
Corequisite: None.
Registration Information: MUS 250 strongly recommended as corequisite.

MUS 212 Wind Ensemble (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the wind band.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performances are required. Permission of instructor. Repeatable (6).

MUS 214 Brass Ensemble (0.5-1 V)
Fall, Spring.
Level two music ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of brass instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities required. Permission of instructor. Repeatable (6).

MUS 215 Mariachi Ensemble (0.5-1 V)
Fall, Spring.
Level two music ensemble specializing in the rehearsal, study and performance of appropriate literature in the Mariachi style.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities required. Permission of instructor. Repeatable (6).

MUS 216 Thunderwolves Drumline (0.5-1 V)
Spring.
Provides an indoor drumline ensemble option for students from across campus who desire to expand their performance knowledge of percussion and other appropriate instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MUS 221 Chamber Ensemble (0.5-1 V)
Fall, Spring.
Secondary music ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of string instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities are required. Permission of instructor. Repeatable (6).

MUS 223 Percussion Techniques 1(0-2)
Fall, Spring.
Instruction in the fundamentals of percussion instruments from a pedagogical approach, enabling students to effectively teach beginners.
Prerequisite: None.
Corequisite: None.
Registration Information: Primarily intended for students in Music Education.

MUS 224 Percussion Ensemble (0.5-1 V)
Fall, Spring.
Music ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of percussion instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities are required. Permission of instructor. Repeatable (6).

MUS 227 Func. Piano II: Int/Proficiency 1(0-2)
Fall, Spring.
Continuation of MUS 127. Emphasis on providing further skills necessary for successful completion of the Proficiency Exam.
Prerequisite: MUS 127.
Corequisite: None.
Registration Information: Repeatable (99).

MUS 229 Piano Proficiency Completion 1(0-1)
Fall, Spring.
One-half hour private lesson per week in which to complete the preparation for and take the Piano Proficiency Exam.
Prerequisite: MUS 127 and MUS 227.
Corequisite: None.
Registration Information: Permission of instructor.

MUS 230 Marching Band (0.5-1 V)
Fall.
Provides functional music at home football games and select special occasions while serving as a laboratory of learning for future music educators.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MUS 231 Pep Band (0.5-1 V)
As Needed.
Provides functional music at various home athletic events and select special occasions while serving as a laboratory of learning for future music educators.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

MUS 232 Guitar Ensemble, Classical (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate classical guitar literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities are required. Permission of instructor. Repeatable (6).

MUS 233 Woodwind Techniques 1(0-2)
Fall, Spring.
Instruction in the fundamentals of woodwind instruments from a pedagogical approach, enabling students to effectively teach beginners.
Prerequisite: None.
Corequisite: None.
Registration Information: Primarily intended for students in Music Education.

MUS 234 Woodwind Ensemble (0.5-1 V)
Fall, Spring.
Music ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of woodwind instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities are required. Permission of instructor. Repeatable (6).

MUS 236 Guitar Ensemble, Jazz (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate non-classical guitar literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities are required. Permission of instructor. Repeatable (6).

MUS 240 Staging for Singers 1(0-1)
Fall, Spring.
An elective course providing instruction in blocking and acting for singers in scenes from musical theater or opera.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 242 Piano Ensemble (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate piano ensemble literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities are required. Permission of instructor. Repeatable (6).

MUS 243 String Techniques 1(0-2)
Fall, Spring.
Instruction in the fundamentals of stringed instruments from a pedagogical approach, enabling students to effectively teach beginners.
Prerequisite: None.
Corequisite: None.
Registration Information: Primarily intended for students in Music Education.

MUS 244 Orchestra (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the full orchestra.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and activities are required. Permission of instructor. Repeatable (6).

MUS 250 Music Theory III 3(3-0)
Fall.
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: MUS 210.
Corequisite: None.
Registration Information: MUS 211 strongly suggested as corequisite.

MUS 251 Aural Skills III (2 V)
Spring.
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: MUS 211.
Corequisite: None.
Registration Information: MUS 280 strongly suggested as corequisite.

MUS 252 Jazz Improvisation II 2(2-0)
Spring.
Continuation of instruction in theory and techniques of improvisation in various styles of jazz. Includes developing familiarity with various representative jazz artists.
Prerequisite: MUS 152.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MUS 253 Brass Techniques 1(0-2)
Fall, Spring.
Instruction in the fundamentals of brass instruments from a pedagogical approach, enabling students to effectively teach beginners.
Prerequisite: None.
Corequisite: None.
Registration Information: Primarily intended for students in Music Education.

MUS 254 Jazz Ensemble (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the jazz ensemble.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performances are required. Repeatable (6).

MUS 260 Applied Violin, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 261 Applied Viola, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 262 Applied Cello, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 263 Applied Bass, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 264 Applied Flute, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 265 Applied Oboe, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 266 Applied Bassoon, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 267 Applied Clarinet, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 268 Applied Saxophone, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 269 Applied Voice, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 270 Applied Trumpet, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 271 Applied French Horn, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 272 Applied Trombone, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 273 Applied Euphonium, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 274 Applied Tuba, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 275 Applied Percussion, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 276 Applied Piano, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 277 Applied Organ, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 278 Applied Classical Guitar, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 279 Applied Jazz/Comm. Guitar Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Freshman and Sophomore music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Declared music major. Permission of instructor. Repeatable (8).

MUS 280 Music Theory IV 3(3-0)
Spring.
A continuation of MUS 250. A harmonic study of the emergence of 20th century compositional techniques from chromatic functional harmonic schemes.
Prerequisite: MUS 250.
Corequisite: None.
Registration Information: MUS 251 strongly suggested as corequisite.

MUS 281 Aural Skills IV 2(1-2)
Fall.
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: MUS 251.
Corequisite: None.
Registration Information: None.

MUS 283 Music Theory Workshop 3(3-0)
As Needed.
Offered in summer semesters for students to improve their music theory proficiency.
Prerequisite: None.
Corequisite: None.
Registration Information: Credit may be applicable for degree requirements by examination. Repeatable (12).

MUS 284 Aural Skills Workshop 2(2-0)
As Needed.
Offered in summer semesters for students to improve their aural skills proficiency.
Prerequisite: None.
Corequisite: None.
Registration Information: Credit may be applicable for degree requirements by examination. Repeatable (8).

MUS 285 Cultural History of Popular Music 2(2-0)
Fall, Spring.
A survey of the various styles of American popular music from approximately 1900 to the present including folk music, ragtime, blues, jazz, and rock.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 291 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

MUS 301 Music Performance Symposium III (1 V)
Fall, Spring.
Level three course in observation and critique of music performances; includes lectures, clinics, demonstrations, and performance preparation.
Prerequisite: MUS 201.
Corequisite: None.
Registration Information: Weekly critiques required for credit. Repeatable (2).

MUS 303 Music and Computer Technology II 1(0-2)
Fall, Spring.
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.
Corequisite: None.
Registration Information: None.

MUS 305 Music History I 3(3-0)
Fall.
An in-depth study of music history and representative literature from Antiquity to the Classical period.
Prerequisite: MUS 118 and MUS 150 and MUS 210.
Corequisite: None.
Registration Information: None.

MUS 306 Technology for Music Educators 2(2-1)
Fall, Spring.
Applies educational technology to the classroom and performance activities of music teachers, including instruction, communication, sound recording and editing.
Prerequisite: MUS 103.
Corequisite: None.
Registration Information: None.

MUS 310 Audio Production II: Pro Tools 2(2-0)
Fall, Spring.
Advanced instruction in the use of Pro Tools for music mixing and mastering.
Prerequisite: MUS 110 and MUS 303.
Corequisite: None.
Registration Information: None.

MUS 313 Vocal Pedagogy 2(2-0)
Fall.
Introductory class designed to guide upper-class voice students in learning effective teaching skills as a private voice teacher. Topics covered will include the anatomy, physiology, acoustics, and care of the voice.
Prerequisites: None.
Corequisites: None.
Registration Information: Primarily for vocal music students.

MUS 323 English, Italian, & Latin Diction for Singers 2(2-0)
Spring.
A course in reading and pronunciation of English, Italian, and Latin for singers. Utilizes the International Phonetic Alphabet. Course intended for vocal music students.
Prerequisite: None.
Corequisite: None.
Registration Information: Primarily for vocal music students.

MUS 324 German Diction for Singers 2(2-0)
Fall.
A course in reading and pronunciation of German for singers. Utilizes the International Phonetic Alphabet.
Prerequisites: None.
Corequisites: None.
Registration Information: Primarily for vocal music students.

MUS 325 French & Spanish Diction for Singers 2(2-0)
Spring.
A course in reading and pronunciation of English, Italian, and Latin for singers. Utilizes the International Phonetic Alphabet.
Prerequisites: None.
Corequisites: None.
Registration Information: Primarily for vocal music students.

MUS 326 Guitar Physiology and Technique 2(0-2)
As Needed.
Focus on advanced knowledge of the fretboard, harmony, sightreading, and arranging for guitar.
Prerequisite: None.
Corequisite: None.
Registration Information: Successful completion of junior qualifying exam. Permission of instructor.

MUS 327 Guitar Ped II: Adv Sight Reading 2(0-2)
As Needed.
Focus on advanced sight reading skills for guitarists and the teaching of these skills.
Prerequisite: None.
Corequisite: None.
Registration Information: Successful completion of junior qualifying exam. Permission of instructor.

MUS 337 Introduction to World Music 3(3-0)
Fall, Spring, Summer.
A focus on various world music traditions and their integration into western and non-western contemporary styles. Includes significant musical compositions, composers/musicians, analysis, and multi-cultural issues.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 339 Applied Music Composition 1(0-0.5)
Fall, Spring.
Applied music study in composition. One half-hour lesson per week; time to be arranged with the instructor.
Prerequisite: MUS 280.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 340 General Music Methods 2(2-1)
Fall.
Comprehensive study in materials, techniques, methods, and problem-solving techniques for the teacher of general music in the public schools. Requires 20 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to the Teacher Education Program.

MUS 345 Junior Lecture Recital 1(1-0)
Fall, Spring.
Weekly one-hour meeting with instructor to complete lecture component of the Junior Lecture Recital.
Prerequisite: None.
Corequisite: MUS 360 and MUS 371.
Registration Information: 8 hours of Applied Music earned.

MUS 346 Piano Literature 2(2-0)
As Needed.
Survey of piano literature from the 18th-century to the present.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 347 Piano Pedagogy 2(2-0)
As Needed.
Introduction to the practices in teaching private and class piano.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 349 Junior Recital 2(0-1)
Fall, Spring.
Weekly 1 hour lesson with instructor in preparation and completion of the Junior Recital.
Prerequisite: None.
Corequisite: None.
Registration Information: Requires 6 earned hours of Applied Music. Repeatable (4).

MUS 350 Theory V 2(2-0)
As Needed.
Analysis and application of compositional techniques in music from all style periods, including form, harmony, and style. This course will focus most specifically on 16th and 18th century counterpoint and the Classical era.
Prerequisite: MUS 280.
Corequisite: None.
Registration Information: None.

MUS 354 Theory VI 2(2-0)
As Needed.
Analysis and application of compositional techniques in music from the 19th century (Romantic era) and 20th century (Modern era).
Prerequisites: MUS 280.
Corequisites: None.
Registration Information: None.

MUS 355 Music History II 3(3-0)
Spring.
An in-depth study of music history and representative literature from the Classical period to the present.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 356 World Music (3 V)
As Needed.
A study of world music traditions and their integration into western and non-western contemporary styles. Includes significant musical compositions, composers and historical eras; women composers and multi-cultural issues.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 357 Orchestration and Arranging 2(2-0)
Fall.
Instruction and application in techniques of scoring music for various combinations of musical mediums. Includes scoring for strings, woodwinds, brasses, percussion, and voices.
Prerequisite: MUS 150 and MUS 151 and MUS 210 and MUS 211 and MUS 250 and MUS 251 and MUS 280 and MUS 281.
Corequisite: None.
Registration Information: None.

MUS 358 Basic Conducting 2(2-0)
Fall.
Instruction in the conducting of music, with an emphasis on building basic skills and techniques.
Prerequisite: MUS 150 and MUS 151 and MUS 210 and MUS 211 and MUS 250 and MUS 251 and MUS 280 and MUS 281 and MUS 357.
Corequisite: None.
Registration Information: None.

MUS 359 Advanced Conducting 2(0-1)
Spring.
Continuing instruction in the conducting of music in the student's choice of emphasis areas.
Prerequisite: MUS 358.
Corequisite: None.
Registration Information: Permission of Instructor.

MUS 360 Applied Violin, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 361 Applied Viola, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 362 Applied Cello, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 363 Applied Bass, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 364 Applied Flute, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 365 Applied Oboe, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 366 Applied Bassoon, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 367 Applied Clarinet, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 368 Applied Saxophone, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 369 Applied Voice, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 370 Applied Trumpet, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 371 Applied French Horn, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 372 Applied Trombone, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 373 Applied Euphonium, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 374 Applied Tuba, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 375 Applied Percussion, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 376 Applied Piano, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 377 Applied Organ, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 378 Applied Classical Guitar, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 379 Applied Jazz/Comm. Guitar Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Junior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 380 Applied Violin, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 381 Applied Viola, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 382 Applied Cello, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 383 Applied Bass, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 384 Applied Flute, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 385 Applied Oboe, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 386 Applied Bassoon, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 387 Applied Clarinet, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 388 Applied Saxophone, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 389 Applied Voice, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 390 Applied Trumpet, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 391 Applied French Horn, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 392 Applied Trombone, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 393 Applied Euphonium, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 394 Applied Tuba, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 395 Applied Percussion, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 396 Applied Piano, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 397 Applied Organ, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 398 Applied Classical Guitar, Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 399 Applied Jazz/Comm. Guitar Non-Major (1-2 V)
Fall, Spring.
In-depth applied study in various performance areas for the upper division non-major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Permission of instructor. Repeatable (99).

MUS 401 Music Performance Symposium IV (1 V)
Fall, Spring.
Level four course in observation and critique of music performances; includes lectures, clinics, demonstrations, and performance preparation.
Prerequisite: MUS 301.
Corequisite: None.
Registration Information: Weekly critiques required for credit. Repeatable (2).

MUS 402 Concert Choir (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the choral ensemble.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performances are required. Repeatable (6).

MUS 404 Collaborative Music Ensemble (0.5-1 V)
As Needed.
Ensemble specializing in small chamber works for piano, winds, strings, in various combinations.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MUS 407 University Band (0.5-1 V)
Spring.
Provides a Concert Band performing opportunity for students from all disciplines across campus.
Prerequisite: None.
Corequisite: None.
Registration Information: Director approval. Repeatable (6).

MUS 408 Vocal Jazz Ensemble (0.5-1 V)
Fall, Spring.
Secondary music ensemble specializing in the rehearsal, study, and public performance of appropriate vocal jazz ensemble literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performances are required. Repeatable (6).

MUS 409 Chamber Choir (0.5-1 V)
Fall, Spring.
Primary music ensemble for vocal majors specializing in the rehearsal, study, and public performance of advanced choral literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities required. Repeatable (6).

MUS 410 Audio Production Lab 1(0-1)
Fall, Spring.
Offers advanced students the opportunity to participate in and direct live performance recording of CSU Pueblo ensembles.
Prerequisite: MUS 110 and MUS 303.
Corequisite: None.
Registration Information: MUS 310 strongly suggested as prerequisite.

MUS 412 Wind Ensemble (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the wind band.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performances are required. Repeatable (6).

MUS 414 Brass Ensemble (0.5-1 V)
Fall, Spring.
Music ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of brass instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities required. Repeatable (6).

MUS 415 Mariachi Ensemble (0.5-1 V)
Fall, Spring.
Music ensemble specializing in the rehearsal, study, and performance of appropriate literature in the Mariachi style.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities required. Repeatable (6).

MUS 416 Thunderwolves Drumline (0.5-1 V)
Spring.
Provides an indoor drumline ensemble option for students from across campus who desire to expand their performance knowledge of percussion and other appropriate instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Director approval. Repeatable (6).

MUS 420 Film Scoring 2(2-0)
Fall, Spring.
The principles and history of film music, writing music for film and other music media integrating Sibelius and Pro Tools software.
Prerequisite: None.
Corequisite: None.
Registration Information: MUS 180 strongly recommend as prerequisite. Permission of instructor.

MUS 421 Chamber Ensemble (0.5-1 V)
Fall, Spring.
Level four secondary ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of string instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities required. Repeatable (6).

MUS 424 Percussion Ensemble (0.5-1 V)
Fall, Spring.
Ensemble specializing in the rehearsal, and performance of appropriate literature for combinations of percussion instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities are required. Repeatable (6).

MUS 426 Advanced Piano Pedagogy 2(2-0)
As Needed.
Advanced study of practices and methods of piano instruction both in individual studio lessons and class piano courses.
Prerequisite: MUS 346.
Corequisite: None.
Registration Information: None.

MUS 427 Piano Pedagogy Practicum 2(2-0)
As Needed.
Practicum rotates experiences in Studio Management and Teaching Seminar, Class Piano Practicum, Musical Event Management.
Prerequisite: MUS 446.
Corequisite: None.
Registration Information: Repeatable (6).

MUS 430 Marching Band (0.5-1 V)
Fall.
Provides functional music at home football games and select special occasions while serving as a laboratory of learning for future music educators.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (6).

MUS 431 Pep Band (0.5-1 V)
As Needed.
Provides functional music at various home athletic events and select special occasions while serving as a laboratory of learning for future music educators.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

MUS 432 Guitar Ensemble, Classical (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate classical guitar literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities are required. Repeatable (6).

MUS 434 Woodwind Ensemble (0.5-1 V)
Fall, Spring.
Music ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of woodwind instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities are required. Repeatable (6).

MUS 436 Guitar Ensemble, Jazz (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate non-classical guitar literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities are required. Repeatable (6).

MUS 438 Composition Recital 2(0-1)
Fall, Spring.
In-depth applied study to composition leading to the performance of original works.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MUS 439 Recital: Jazz Studies 2(0-1)
Fall, Spring.
In-depth applied study in jazz studies leading to the performance of a solo or joint recital.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MUS 440 Choral Music Methods 2(2-1)
Spring.
Comprehensive study in materials, techniques, methods, and problem-solving techniques for the teacher of choral music in the public schools. Requires 20 hours of field experience.
Prerequisite: MUS 113 and MUS 223 and MUS 233 and MUS 243 and MUS 253.
Corequisite: None.
Registration Information: Admission to the Teacher Education Program.

MUS 441 Instrumental Music Methods 2(2-1)
Spring.
Comprehensive study in materials, techniques, methods, and problem-solving techniques for the teacher of instrumental music in the public schools. Requires 20 hours of field experience.
Prerequisite: MUS 113 and MUS 223 and MUS 233 and MUS 243 and MUS 253.
Corequisite: None.
Registration Information: Admission to the Teacher Education Program.

MUS 442 Piano Ensemble (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate piano ensemble literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performance activities are required. Repeatable (6).

MUS 444 Orchestra (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the full orchestra.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and activities are required. Repeatable (6).

MUS 445 Applied Violin, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 446 Applied Viola, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 447 Applied Cello, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 448 Applied Bass, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 449 Applied Flute, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 454 Jazz Ensemble (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the jazz ensemble.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Additional rehearsals and performances are required. Repeatable (6).

MUS 455 Applied Oboe, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 456 Applied Bassoon, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 457 Applied Clarinet, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 458 Applied Saxophone, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 459 Applied Voice, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 460 Applied Trumpet, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 461 Applied French Horn, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 462 Applied Trombone, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 463 Applied Euphonium, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 464 Applied Tuba, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 465 Applied Percussion, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 466 Applied Piano, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 467 Applied Organ, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 468 Applied Classical Guitar, Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 469 Applied Jazz/Comm. Guitar Major 2(0-1)
Fall, Spring.
In-depth applied study in various performance areas for the Senior music major.
Prerequisite: None.
Corequisite: None.
Registration Information: Upper division standing. Declared music major. Permission of instructor. Repeatable (4).

MUS 470 Senior Recital, Violin 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 471 Senior Recital, Viola 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 472 Senior Recital, Cello 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 473 Senior Recital, Bass 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 474 Senior Recital, Flute 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 475 Senior Recital, Oboe 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 476 Senior Recital, Bassoon 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 477 Senior Recital, Clarinet 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 478 Senior Recital, Saxophone 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 479 Senior Recital, Voice 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 480 Senior Recital, Trumpet 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 481 Senior Recital, French Horn 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 482 Senior Recital, Trombone 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 483 Senior Recital, Euphonium 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 484 Senior Recital, Tuba 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 485 Senior Recital, Percussion 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 486 Senior Recital, Piano 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 487 Senior Recital, Organ 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 488 Senior Recital, Classical Guitar 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 489 Senior Recital, Jazz Guitar 2(0-1)
Fall, Spring.
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: None.
Corequisite: None.
Registration Information: Upper division standing. Faculty approval. Permission of instructor.

MUS 491 Special Topics (1-4 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

MUS 495 Independent Study (1-4 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

MUS 498 Internship 1(0-1)
Fall, Spring.
Provides an infield, firsthand experience in traditional church music programs.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (3).

MUS 501 Special Methods in Music Education 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

MUS 502 Concert Choir (0.5-1 V)
Fall, Spring.
Primary ensemble for vocal majors, specializing in the rehearsal, study, and public performance of advanced choral literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities required. Permission of instructor. Repeatable (4).

MUS 504 Collaborative Music Ensemble (0.5-1 V)
As Needed.
Ensemble specializing in small chamber works for piano, winds, strings, in various combinations.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (2).

MUS 509 Chamber Choir (0.5-1 V)
Fall, Spring.
Primary ensemble for vocal majors, specializing in the rehearsal, study, and public performance of advanced choral literature.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performance activities required. Permission of instructor. Repeatable (4).

MUS 512 Wind Ensemble (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of appropriate literature for the wind band.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and performances are required. Permission of instructor. Repeatable (4).

MUS 513 Advanced Vocal Pedagogy 1(0-1)
As Needed.
Designed for the experienced vocal music teacher who seeks graduate-level pedagogical techniques to better guide and develop the adolescent voice.
Prerequisite: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 520 Graduate Music Ensemble (0.5-1 V)
As Needed.
Secondary ensembles specializing in the rehearsal, study, and public performance of specific genres, i.e., jazz, chamber music.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (4).

MUS 523 Advanced Percussion Pedagogy 1(0-1)
As Needed.
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: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 529 Piano Proficiency Completion 1(0-0.5)
Fall, Spring.
One-half hour private lesson per week to prepare for and complete the departmental Piano Proficiency Exam.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MUS 530 Marching Band (0.5-1 V)
Fall.
Provides functional music at home football games and select special occasions while serving as a laboratory of learning for future music educators.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (2).

MUS 531 Pep Band (0.5-1 V)
As Needed.
Provides functional music at various home athletic events and select special occasions while serving as a laboratory of learning for future music educators.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (2).

MUS 533 Advanced String Pedagogy 1(0-1)
As Needed.
This course expands upon the basics of string pedagogy and literature. Includes discussion of problems and possible solutions in student playing techniques.
Prerequisite: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 540 Kodaly Method for Elementary Music 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 543 Advanced Woodwind Pedagogy 1(0-1)
As Needed.
Designed for the experienced instrumental music teacher who seeks advanced techniques in the teaching and playing of woodwind instruments.
Prerequisite: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 544 Orchestra (0.5-1 V)
Fall, Spring.
Rehearsal, study, and public performance of selected appropriate literature for the full orchestra.
Prerequisite: None.
Corequisite: None.
Registration Information: Additional rehearsals and activities are required. Permission of instructor. Repeatable (4).

MUS 545 Current Issues in Music Education 3(3-0)
As Needed.
History and philosophy of music education in public schools, with readings, discussions, and practical applications of content standards in instruction and assessment.
Prerequisite: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 550 Instrumental Conducting 2(2-0)
As Needed.
Graduate level instruction in instrumental conducting in a pedagogical setting with emphasis on selection of appropriate literature as well as technique.
Prerequisite: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 553 Advanced Brass Pedagogy 1(0-1)
As Needed.
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: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 559 Advanced Music Analysis 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 560 Choral Conducting 2(2-0)
As Needed.
Graduate level instruction in choral conducting in a pedagogical setting with emphasis on selection of appropriate literature as well as technique.
Prerequisite: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department Chair.

MUS 565 Methods of Research in Music Ed 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: Bachelor's degree and teaching certificate OR approval of the Music Department chair.

MUS 570 Advanced Applied Music, Strings 2(0-1)
As Needed.
In-depth applied study in guitar or orchestral string performance areas for the highly advanced student.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (4).

MUS 571 Advanced Applied Music, Woodwinds 2(0-1)
As Needed.
In-depth applied study in woodwind performance areas for the highly advanced student.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (4).

MUS 572 Advanced Applied Music, Percussion 2(0-1)
As Needed.
In-depth applied study in percussion performance for the highly advanced student.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (4).

MUS 573 Advanced Applied Music, Brass 2(0-1)
As Needed.
In-depth applied study in brass performance areas for the highly advanced student.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (4).

MUS 574 Advanced Applied Music, Voice 2(0-1)
As Needed.
In-depth applied study in vocal performance for the highly advanced student.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (4).

MUS 579 Graduate Recital 2(0-1)
Fall, Spring.
In-depth advanced applied study leading to the performance of a solo or joint recital.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MUS 580 Advanced General Music Methods 2(2-1)
As Needed.
Advanced, comprehensive study in materials, techniques, methods, and problem-solving techniques for the teacher of general music in the public schools. Requires 20 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to Teacher Education Program.

MUS 581 Advanced Choral Methods 2(2-1)
As Needed.
Advanced, comprehensive study in materials, techniques, methods, and problem-solving techniques for the teacher of choral music in the public schools. Requires 20 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to Teacher Education Program.

MUS 582 Advanced Instrumental Methods 2(2-1)
As Needed.
Advanced, comprehensive study in materials, techniques, methods, and problem-solving techniques for the teacher of choral music in the public schools. Requires 20 hours of field experience.
Prerequisite: None.
Corequisite: None.
Registration Information: Admission to Teacher Education Program.

MUS 591 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

MUS 593 Seminar (1-3 V)
As Needed.
Practical application of current music techniques to secondary teaching.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Repeatable (99).

MUS 594 Field Experience 6(0-6)
Fall, Spring, Summer.
Field experience in an educational setting.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor.

MUS 595 Independent Study (1-4 V)
Fall, Spring, Summer.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

Non-Profit Administration (NPA)

NPA 494 Field Experience 3(3-0)
Fall, Spring, Summer.
This course is the required 3-credit field experience for the nonprofit minor.
Prerequisite: MC 215; POLS 330 or POLS 340; PYSC 315 or SOC 423; SW 205.
Corequisites: None.
Registration Information: None.

Nursing (NSG)

NSG 207 Nursing Pathophysiology 3(3-0)
Fall, Spring.
Introduces basic disease processes of individual body systems. Incorporates nursing assessment/diagnosis with associated intersystem diseases utilizing evidence-based practice and patient-centered, safe care.
Prerequisite: BIOL 223 and BIOL 223L and BIOL 224 and BIOL 224L.
Corequisite: None.
Registration Information: None.

NSG 230 (WS 230) Women, Health, & Society 3(3-0)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 231 Concepts for Professional Nursing 2(2-0)
Spring, Summer.
Introduces nursing history, theory, and key concepts related to healthcare and professional integrity and leadership.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. Follow nursing program option catalog sequence.

NSG 232 Fundamentals of Nursing Care 3(3-0)
Spring, Summer.
Utilizes the nursing process to provide safe, patient-centered care. Emphasizes teamwork, collaboration, evidence-based practice, and quality improvement.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. Follow nursing program option catalog sequence.

NSG 232L Fundamentals of Nursing Care Lab 3.5(0-7)
Spring, Summer.
Application of NSG 232. Assists students to develop fundamental competencies to provide safe, evidenced-based, patient-centered care.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 232 and NSG 232L simultaneous enrollment. NSG 232L must be completed within 6 months of completion of NSG 232. If student fails NSG 232 or NSG 232L, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 232S Fundamentals of Nursing Care Sim 0.5(0-1)
Spring, Summer.
Application of NSG 232/232L. Assist students to develop fundamentals competencies to provide safe, evidenced-based patient-centered care in a simulated environment. Follow nursing program catalog sequence.
Prerequisite: None.
Corequisite: NSG 232 and NSG 232L.
Registration Information: Restricted to nursing major. NSG 232 and NSG 232S simultaneous enrollment. NSG 232S must be completed within 6 months of completion of NSG 232. If student fails NSG 232 or NSG 32S, not required to repeat both courses if within State Board of Nursing time limits.

NSG 291 Special Topics (1-4 V)
As Needed.
Topics and/or nursing skills for enrichment of required nursing courses, and which serve the interest of student, will be considered.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

NSG 295 Independent Study (1-6 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

NSG 302 Health Promotion and Assessment 2(2-0)
Spring, Summer.
Utilizes evidence-based practice to assess, analyze and promote health in diverse populations across the lifespan.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing or general health science major. Follow nursing program option catalog sequence.

NSG 302L Health Promotion and Assessment Lab 1(0-2)
Spring, Summer.
Fosters evidence-based practice and clinical judgment to develop comprehensive assessment skills across the lifespan.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing or general health science major. Follow nursing program option catalog sequence.

NSG 308 Pharmacology in Nursing Practice 3(3-0)
Spring, Summer.
Applies pharmacokinetics, pharmacodynamics, and pharmacotherapeutics to patient-centered care. Focuses on safety, legal implications and evidence-based practice.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing or general health science major.

NSG 309 Professional Nursing Practice 4(4-0)
As Needed.
Introduces registered nurses to mission and philosophy of the nursing program, professional nursing practice and personal growth. Utilizes concepts of evidence-based, patient-centered care.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to RN to BSN or MS nursing major.

NSG 311 Integration of QSEN for Nurses 3(3-0)
As Needed.
Apply QSEN skills, attitudes, knowledge to improve health care delivery. Identify concepts of quality improvement based on evidence. Survey teamwork/communication /collaboration and transitions of care.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to RN to BSN or MS nursing major.

NSG 312 Caring for Childbearing Family 3(3-0)
Fall, Spring.
Introduces safe, patient-centered care of the neonate and procreative family during the peri-natal period. Includes health promotion, high risk management, safety and human sexuality.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. Follow nursing program option catalog sequence.

NSG 312L Caring for Childbearing Family Lab 2.5(0-5)
Fall, Spring.
Application of NSG 312. Provides evidence-based, patient-centered care to the neonate and family throughout the peri-natal period.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 312 simultaneous enrollment. NSG 312L must be completed within 6 months of completion of NSG 312. If student fails NSG 312 or NSG 312L, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 312S NSG Care Childbearing Family Sim 0.5(0-1)
Fall, Spring.
Application of NSG 312/312L. Provides evidence-based, patient-centered care to neonates and childbearing families based upon best practices, in a simulated environment.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 312 simultaneous enrollment. NSG 312S must be completed within 6 months of completion of NSG 312. If student fails NSG 312 or NSG 312S, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 322 Caring for Adults I 4(4-0)
Fall, Spring.
Integrates assessment, pharmacology and pathophysiologic concepts utilizing evidence-based practice to provide safe, patient-centered care to adults with acute and chronic health concerns.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. Follow nursing program option catalog sequence.

NSG 322L Caring for Adults I Lab 3.5(0-7)
Fall, Spring.
Application of NSG 322. Provides evidence-based, patient-centered care to adults and families based upon best practices.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 322 simultaneous enrollment. NSG 322L must be completed within 6 months of completion of NSG 322. If student fails NSG 322 or NSG 322L, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 322S Caring for Adults I Simulation 0.5(0-1)
Fall, Spring.
Application of NSG 322/322L. Provides evidence-based, patient-centered care to adults and families based upon best practices, in a simulated environment.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 322 simultaneous enrollment. NSG 322S must be completed within 6 months of completion of NSG 322. If student fails NSG 322 or NSG 322S, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 331 Healthy Aging 2(2-0)
Spring, Summer.
Utilizes evidence-based practice theories to promote healthy aging and patient-centered care of older adults.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing or general health sciences major. Follow nursing program option catalog sequence.

NSG 332 Caring for Children/Families 3(3-0)
Fall, Spring.
Introduces patient-centered care of children, adolescents and their families. Emphasizes evidence-based practice related to health promotion, safety and disease management.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. Follow nursing program option catalog sequence.

NSG 332L Caring for Children/Families Lab 2.5(0-5)
Fall, Spring.
Application of NSG 332. Provides evidence-based, patient-centered care of children, adolescents, and families.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 332 simultaneous enrollment. NSG 332L must be completed within 6 months of completion of NSG 332. If student fails NSG 332 or NSG 332L, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 332S Caring for Children/Families Sim 0.5(0-1)
Fall, Spring.
Application of NSG 332/332L. Provides evidence-based, patient-centered care to children, adolescents and their families based upon best practices, in a simulated environment.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 332 simultaneous enrollment. NSG 332S must be completed within 6 months of completion of NSG 332. If student fails NSG 332 or NSG 332S, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 351 Evidence Based Nursing Practice 3(3-0)
As Needed.
Critically analyzes and applies nursing research to practice. Uses evidence-based practice to promote continuous quality improvement and patient-centered care.
Prerequisite: MATH 156.
Corequisite: None.
Registration Information: Restricted to nursing. RN to BSN or general health science major.

NSG 371 Healthcare Informatics 2(2-0)
As Needed.
Introduces theory, infrastructure and ethical application of health informatics for the delivery of safe, effective, efficient, and quality patient-centered care.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing. RN to BSN or general health science major.

NSG 372 Clinical Practicum I 3(0-9)
Summer.
Provides an opportunity for a concentrated clinical practicum with instructor approval.
Prerequisite: NSG 308 and NSG 312 and NSG 322 and NSG 331 and NSG 332 and NSG 351 and NSG 371 and NSG 382.
Corequisite: None.
Registration Information: Restricted to nursing major. Grade of B or better is required in prerequisite courses. Repeatable (6).

NSG 382 Dynamics of Behavioral Health 3(3-0)
Fall, Spring.
Introduces evidence-based concepts focusing on mental health promotion and disease specific patient-centered care.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. Follow nursing program option catalog sequence.

NSG 382L Dynamics of Behavioral Health Lab 2.5(0-5)
Fall, Spring.
Application of NSG 382. Provides evidence-based, patient-centered care in behavioral health settings.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 382 simultaneous enrollment. NSG 382L must be completed within 6 months of completion of NSG 382. If student fails NSG 332 or NSG 332L, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 382S Dynamics of Behavioral Health Sim 0.5(0-1)
Fall, Spring.
Application of NSG 382/382L. Provides evidence-based, patient-centered behavioral health care based upon best practices, in a simulated environment.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 382 simultaneous enrollment. NSG 382S must be completed within 6 months of completion of NSG 382. If student fails NSG 382 or NSG 382S, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 391 Special Topics (1-5 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Permission of instructor. Repeatable (99).

NSG 408 Synthesis Of Pharm (2 V)
Spring.
Synthesizes pharmacological concepts and prototype agents with focus on the physiological action, effect and utilization of selected drug groups in evidence-based practice.
Prerequisites: NSG 420.
Corequisites: None.
Registration Information: A grade of B or better is required for prerequisite courses.

NSG 420 Caring For Adults II 4(4-0)
Fall, Spring.
Integrates assessment, pharmacology and pathophysiology concepts using evidence-based practice to provide patient-centered care to adults with complex health concerns.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. Follow nursing program option catalog sequence.

NSG 420L Caring for Adults II Lab 3(0-6)
Fall, Spring.
Application of NSG 420. Provides patient centered care to adults and families utilizing evidence-based practice. Emphasizes teamwork and collaboration for multiple patients.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 420 simultaneous enrollment. NSG 420L must be completed within 6 months of completion of NSG 420. If student fails NSG 420 or NSG 420L, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 420S Caring for Adults II Simulation 1(0-2)
Fall, Spring.
Application of NSG 420. Provides simulated patient centered care to adults and families utilizing evidence based practice. Emphasizes teamwork and collaboration for the care of multiple simulated patients.
Prerequisite: None.
Corequisite: NSG 420; NSG 420L.
Registration Information: Restricted to nursing major. NSG 420 simultaneous enrollment. NSG 420S must be completed within 6 months of completion of NSG 420. If student fails NSG 420 or NSG 420S, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 431 Gerontological Nsg (3 V)
As Needed.
Synthesize evidence-based practice theories and integrates concepts of healthy aging to promote patient-centered care of older adults by allied health professionals.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

NSG 442 Global Public Health 3(3-0)
Fall, Summer.
Synthesizes theory, research, epidemiological public health principles into planning interventions to meet the multidimensional health needs of a diverse, global society.
Prerequisite: NSG 351.
Corequisite: None.
Registration Information: Restricted to nursing or general health science major.

NSG 442L Global Public Health Lab 2.5(0-5)
Fall, Summer.
Application of NSG 442. Provides population-focused care in community health settings.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major or general health science major. NSG 442 simultaneous enrollment for nursing major. NSG 442L must be completed within 6 months of completion of NSG 442. If student fails NSG 442 or NSG 442L, not required to repeat both courses if within State Board of Nursing time limits.

NSG 442S Global Public Health Simulation 0.5(0-1)
Fall, Summer.
Application of NSG 442. Provides simulated patient centered care to adults and families utilizing evidence based practice. Emphasizes teamwork and collaboration for the care of multiple simulated patients.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major or general health science major. NSG 442 simultaneous enrollment for nursing major. NSG 442S must be completed within 6 months of completion of NSG 442. If student fails NSG 442 or NSG 442S, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program catalog sequence.

NSG 443 Global Public Health Nursing for RN's 3(3-0)
As Needed.
Synthesizes theory, research, epidemiological and public health principles as applicable to nursing, to plan for and meet the multidimensional health needs of a diverse, global society.
Prerequisite: NSG 351.
Corequisite: NSG 443L.
Registration Information: NSG 443 must be simultaneous or completed. Restricted to RN to BSN nursing major. Follow nursing program option catalog sequence.

NSG 443L Global Public Health Nursing Lab for RN's 3(0-6)
As Needed.
Application of NSG 443. Provides population-focused/family care in community health settings.
Prerequisite: NSG 351.
Corequisite: None.
Registration Information: NSG 443 must be simultaneous or completed. Restricted to RN to BSN nursing major. Follow nursing program option catalog sequence.

NSG 451 Nursing Leadership and Issues 3(3-0)
As Needed.
Analyzes management and leadership theories. Explores issues related to quality improvement, evidence-based practice, professional integrity/leadership and teamwork/collaboration.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing or RN to BSN major. Follow nursing program option catalog sequence.

NSG 452 Synthesis of Nursing Practice 4(4-0)
Spring, Summer.
Prepares for transition into professional nursing practice. Integrates patient-centered care concepts for a variety of health needs across the lifespan.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. Follow nursing program option catalog sequence.

NSG 452L Synthesis of Nursing Practice Lab 4(0-8)
Spring, Summer.
Application of NSG 452. Manages multiple, complex patients in a variety of health care settings utilizing evidence-based practice. Emphasizes integrity, leadership, team work and collaboration.
Prerequisite: None.
Corequisite: None.
Registration Information: Restricted to nursing major. NSG 452 simultaneous enrollment. NSG 452L must be completed within 6 months of completion of NSG 452. If student fails NSG 442 or NSG 442L, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 452S Synthesis of Nursing Practice Sim 1(0-2)
Spring, Summer.
Application of NSG. 452. Manages multiple, complex simulated patients in the simulation laboratory utilizing evidence-based practice. Emphasizes integrity, leadership, team work and collaboration.
Prerequisite: None.
Corequisite: NSG 452; NSG 452L.
Registration Information: Restricted to nursing major. NSG 452 simultaneous enrollment. NSG 452S must be completed within 6 months of completion of NSG 452. If student fails NSG 452 or NSG 452S, not required to repeat both courses if within State Board of Nursing time limits. Follow nursing program option catalog sequence.

NSG 453 Synthesis for RN's 4(4-0)
As Needed.
Transitions RN's into professional nursing practice. Integrates QSEN concepts for a variety of health needs across the lifespan.
Prerequisite: NSG 309 and NSG 311 and NSG 351 and NSG 371 and NSG 442 and NSG 451.
Corequisite: NSG 453L.
Registration Information: Restricted to RN to BSN nursing major. RN status required.

NSG 453L Synthesis for RN's Lab 5(0-10)
As Needed.
Applies principles from NSG 453. Emphasizes advocacy, integrity, leadership, and patient centered care in a variety of health care and community settings.
Prerequisite: None.
Corequisite: NSG 453.
Registration Information: Restricted to RN to BSN nursing major. RN status required. NSG 453 must be simultaneous or completed.

NSG 472 Clinical Practicum II 3(0-9)
Spring.
Provides an opportunity for a concentrated clinical specialty practicum with instructor approval.
Prerequisite: NSG 372.
Corequisite: None.
Registration Information: Restricted to nursing major. Repeatable (6).

NSG 491 Special Topics (1-6 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

NSG 492 Research 2(2-0)
As Needed.
Faculty-directed research project for undergraduate student.
Prerequisite: NSG 351.
Corequisite: None.
Registration Information: Grade of B or better required for prerequisite courses.

NSG 495 Independent Study (1-6 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

NSG 504 NSG Writing & Presentation Skills 1(1-0)
Fall.
Prepare students for the rigors of academic writing at the graduate and professional levels.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 505 Biostatistics & Research 3(3-0)
Fall.
Analyze nursing and healthcare research using the most common inferential statistical methodologies to identify accurate data results and evidence gaps.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 506 Roles and Issues 2(2-0)
Fall.
Explores advanced practice nursing roles and competencies emphasizing clinical quality, safety and ethical issues.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 507 Advanced Practice Roles 2(2-0)
Fall.
Introduces the core concepts of the advanced nursing practice role.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 508 Advanced Practice Theory 3(3-0)
Fall.
Examines the theoretical basis of nursing which guides evidence-based advanced nursing practice, research, education, and administration.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 512 Research & Evidenced Based Practice 3(3-0)
Spring.
Expand knowledge to determine the best evidence and quality improvement methods to reduce risk and improve patient outcomes in the advanced nursing practice role.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 548 Healthcare: Ethics, Law & Policy 3(3-0)
Spring.
Evaluate ethical, legal and political concepts in healthcare delivery systems.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 550 Health Policy & Finance 3(3-0)
Spring.
Analyze and utilize the historical, political, economic, and financial concepts in the development in one's practice and the advanced nursing practice role.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 551 Health Promotion 2(2-0)
Spring, Summer.
Analyzes concepts of health promotion related to delivery of evidence-based patient-centered care in advanced nursing practice.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 552 Advanced Pathophysiology 3(3-0)
Fall, Summer.
Examines alterations in human psysiologic function in diverse populations across the lifespan using evidence-based practice principles.
Prerequisite: None.
Corequisite: NSG 561.
Registration Information: None.

NSG 561 Advanced Pharmacology 3(3-0)
Fall, Summer.
Applies pharmacological consepts in the management of patients across the lifespan within the scope of evidence-based advanced nursing practice.
Prerequisite: None.
Corequisite: NSG 552.
Registration Information: None.

NSG 562 Advanced Assessment 2(2-0)
Spring.
Enhances assessment skills across the lifespan within the scope of evidence-based advanced nursing practice.
Prerequisite: None.
Corequisite: NSG 562L.
Registration Information: None.

NSG 562L Advanced Assessment Lab 1(0-2)
Spring.
Demonstrates assessment skills across the lifespan within the scope of evidence-based advanced nursing practice.
Prerequisite: None.
Corequisite: NSG 562.
Registration Information: None.

NSG 570 Advanced Evidenced Based Practice 3(3-0)
Spring.
Utilizes analytical methods and disciplined inquiry to expand knowledge for implementation of a safe and quality evidence-based advanced nursing practice.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 571 Healthcare Informatics 2(2-0)
Fall, Summer.
Analyzes theory, infrastructure and ethical application of health informatics for the delivery of quality advanced nursing practice.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 575 Curriculum Development 3(3-0)
Spring.
Focuses on roles, theories and processes of nursing curriculum development from an evidence-based practice foundation.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 576 Instructional Strategies 3(3-0)
Spring.
Explores evidence-based practice learning theories and instructional strategies for teaching nursing in a variety of settings.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 577 Assessment & Evaluation 3(3-0)
Summer.
Focuses on understanding and applying formal and informal assessment and evaluation strategies utilizing informatics in order to implement data-driven instruction.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 583 Nurse Educator Seminar 1(1-0)
Summer.
Synthesizes nurse educator theory and competencies into evidence-based teaching practices.
Prerequisite: NSG 309 and NSG 311 and NSG 371 and NSG 512 and NSG 575 and NSG 576.
Corequisite: NSG 583L.
Registration Information: Approval of instructor.

NSG 583L Nurse Educator Practicum 3(0-9)
Summer.
Applies nurse educator theory and competencies in a variety of educational settings.
Prerequisite: NSG 309 and NSG 311 and NSG 371 and NSG 512 and NSG 575 and NSG 576 and NSG 577.
Corequisite: NSG 583.
Registration Information: Approval of instructor.

NSG 587 Synthesis Experience 9(3-24)
Fall, Spring, Summer.
Synthesizes theory into practice based on specialty competencies and advanced practice clinical requirements. This course may need to be repeated based on specialization.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 590 Special Projects (1-3 V)
As Needed.
Individual project selected, outlined, and pursued by student.
Prerequisite: None.
Corequisite: None.
Registration Information: Graduate standing. Advisor approval. Repeatable (99).

NSG 591 Special Topics (1-6 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (6).

NSG 593 Thesis Seminar 3(3-0)
As Needed.
Creates an advanced nursing practice research proposal as the first step in thesis development.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 594 Field Experience 2(0-8)
Fall, Spring, Summer.
Explore the Nurse Manager and Leader competencies in the advanced nursing practice role during a leadership immersion in a healthcare setting.
Prerequisite: None.
Corequisite: None.
Registration Information: Must complete at least 12 credit hours in program prior to enrolling.

NSG 595 Independent Study (1-6 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

NSG 599 Thesis Research (1-6 V)
As Needed.
Preparation of thesis to meet degree requirements. Must be enrolled each semester in at least one credit hour if thesis is still in process.
Prerequisite: NSG 593.
Corequisite: None.
Registration Information: Approval by thesis advisor. Repeatable (99).

NSG 610 Diagnostic Reasoning 2(2-0)
Spring, Summer.
Focuses on diagnostic reasoning and problem solving for the advanced practice nurse.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 613L Acute Care Skills Lab I 2(0-4)
Spring.
Explore and practice simulated advanced practice nursing procedure skills for the Adult-Gerontology Acute Care and Family Nurse Practitioner.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 614L Acute Care Skills Lab II 1(0-2)
Summer.
Demonstrate safe simulated advanced practice nursing procedure skills for the Adult-Gerontology Acute Care and Family Nurse Practitioner.
Prerequisite: NSG 613L.
Corequisite: None.
Registration Information: None.

NSG 636L FNP Practicum (1-13 V)
Fall, Spring, Summer.
Engages students in primary care management for the family across the lifespan.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (13).

NSG 641 Adult/ Gerontology Acute Care I 3(3-0)
Summer.
Examines the advanced practice nurse's role in patient-centered care of adult and geriatric populations with chronic health needs.
Prerequisite: NSG 610.
Corequisite: NSG 641L.
Registration Information: None.

NSG 642 Adult/ Gerontology Acute Care II 2(2-0)
Fall.
Examines the advanced practice nurse's role in patient-centered care of adult and geriatric population with decompensating chronic health needs.
Prerequisite: NSG 641.
Corequisite: NSG 642L.
Registration Information: None.

NSG 642L AGACNP Practicum II 4(0-4)
Fall.
Recognizes the advanced practice nurse's role in patient-centered care of adult and geriatric populations.
Prerequisite: None.
Corequisite: NSG 642.
Registration Information: None.

NSG 643 Adult/Gerontology Acute Care III 2(2-0)
Spring.
Examines the advanced practice nurse's role in patient-centered care of adult and geriatric populations with chronic conditions focusing on health maintenance to prevent urgent events.
Prerequisite: NSG 642.
Corequisite: NSG 643L.
Registration Information: None.

NSG 643L AGACNP Practicum III 2(0-6)
Spring.
Applies the advanced practice nurse's role in patient-centered care of adult and geriatric populations.
Prerequisite: None.
Corequisite: NSG 643.
Registration Information: None.

NSG 644 Adult/Gerontology Acute Care IV 2(2-0)
Summer.
Examines the advanced practice nurse's role in patient-centered care of adult and geriatric populations with a focus on chronic urgent/emergent health needs.
Prerequisite: NSG 643.
Corequisite: NSG 644L.
Registration Information: None.

NSG 644L AGACNP Practicum IV 2(0-6)
Summer.
Analyzes the advanced practice nurse's role in patient-centered care of adult and geriatric populations.
Prerequisite: None.
Corequisite: NSG 644.
Registration Information: None.

NSG 645 Adult/Gerontology Acute Care V 1(1-0)
Fall.
Examines the advanced practice nurse's role in patient-centered care of adult and geriatric populations with emergent health needs.
Prerequisite: NSG 644.
Corequisite: NSG 645L.
Registration Information: None.

NSG 645L AGACNP Practicum V 2(0-6)
Fall.
Synthesizes the advanced practice nurse's role in patient-centered care of adult and geriatric populations.
Prerequisite: None.
Corequisite: NSG 645.
Registration Information: None.

NSG 646L AGACNP Practicum MS (1-3 V)
Fall, Spring, Summer.
Synthesizes the advanced practice nurse's role in patient-centered care of adult and geriatric populations.
Prerequisite: NSG 642L.
Corequisite: None.
Registration Information: Masters student only in NSG 643, NSG 644, and NSG 645. Repeatable (3).

NSG 651 Psych Mental Health I 2(2-0)
Fall.
Applies theory and evidenced-based practice to the care of the psychiatric-mental health patient across the lifespan.
Prerequisite: NSG 678.
Corequisite: NSG 651L.
Registration Information: None.

NSG 651L PMH Practicum I 2(0-6)
Fall.
Explores the advanced practice nurse's role while providing evidenced-based patient-centered care of psychiatric-mental health patients across the lifespan.
Prerequisite: None.
Corequisite: NSG 651.
Registration Information: None.

NSG 652 Psych Mental Health II 2(2-0)
Spring.
Analyzes the health care management of the psychiatric-mental health patient disorders across the lifespan utilizing evidence-based guidelines.
Prerequisite: NSG 651.
Corequisite: NSG 652L.
Registration Information: None.

NSG 652L PMH Practicum II 2(0-6)
Spring.
Applies the advanced practice nurse's role while providing evidenced based patient-centered care for psychiatric-mental health patients across the lifespan.
Prerequisite: None.
Corequisite: NSG 652.
Registration Information: None.

NSG 653 Psych Mental Health III 3(3-0)
Summer.
Analyzes complex health care management of the psychiatric-mental health patient disorders across the lifespan utilizing evidence-based guidelines.
Prerequisite: NSG 652.
Corequisite: NSG 653L.
Registration Information: None.

NSG 653L PMH Practicum III 3(0-9)
Summer.
Implements the advanced practice nurse's role while providing evidenced based patient-centered care for psychiatric-mental health patients across the lifespan.
Prerequisite: None.
Corequisite: NSG 653.
Registration Information: None.

NSG 654 Psych Mental Health IV 3(3-0)
Fall.
Synthesizes complex health care management of the psychiatric-mental health patient across the lifespan utilizing evidence-based guidelines.
Prerequisite: NSG 653.
Corequisite: NSG 564L.
Registration Information: None.

NSG 654L PMH Practicum IV 3(0-9)
Fall.
Synthesizes the advanced practice nurse's role while providing evidence-based patient-centered care for psychiatric-mental health patients across the lifespan.
Prerequisite: None.
Corequisite: NSG 654.
Registration Information: None.

NSG 655L PMH Practicum MS (1-3 V)
Fall, Spring, Summer.
Synthesizes the advanced practice nurses role while providing patient-centered care of psychiatric-mental health patients across the lifespan.
Prerequisite: NSG 651 and NSG 651L.
Corequisite: None.
Registration Information: Masters student only in NSG 652, 653, and 654. Repeatable (3).

NSG 661 Family I 2(2-0)
Summer.
Introduces primary care health promotion and disease prevention management for the family across the lifespan.
Prerequisite: NSG 610.
Corequisite: NSG 636L and NSG 641.
Registration Information: None.

NSG 662 Family II 2(2-0)
Fall.
Explores primary care management for families across the lifespan with common urgent and acute health needs.
Prerequisite: NSG 661.
Corequisite: NSG 636L and NSG 642.
Registration Information: None.

NSG 663 Family III 2(2-0)
Spring.
Explores primary care management for families across the lifespan for common post traumatic and chronic health needs.
Prerequisite: NSG 662.
Corequisite: NSG 638L and NSG 643.
Registration Information: None.

NSG 664 Family IV 1(1-0)
Summer.
Explores primary care management for families across the lifespan with complex acute exacerbation of chronic health needs.
Prerequisite: NSG 633.
Corequisite: NSG 636L and NSG 644.
Registration Information: None.

NSG 665 Family V 1(1-0)
Fall.
Synthesize primary care management for families across the lifespan with urgent and emergent rural health needs.
Prerequisite: NSG 664.
Corequisite: NSG 636L and NSG 645.
Registration Information: None.

NSG 676 Theoretical Mental Health Models 2(2-0)
Fall, Spring.
Explores theories and conceptual models which frame psychiatric-mental health interventions.
Prerequisite: None.
Corequiste: None.
Registration Information: None.

NSG 677 Psychopharmacology 2(2-0)
Fall, Spring.
Applies psychopharmacological concepts in the management of psychiatric-mental health patients across the lifespan.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 678 Psychiatric Assessment & Evaluation 2(2-0)
Summer.
Analyzes techniques of assessment and evaluation utilizing standard diagnostic criteria.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 679 Psychiatric Differential Diagnosis 2(2-0)
Summer.
Focuses on diagnostic reasoning and problem solving for the psychiatric-mental health advanced practice nurse.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 688 MS Nurse Manager & Leader Practice Capstone (3 V)
Fall.
Integrate the Nurse Manager and Leader competencies into the advanced nursing practice role during a leadership immersion capstone project in a healthcare setting.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

NSG 709L DNP Clinical Gap Hours 1-12(0-3-36)
Fall, Spring, Summer.
Applies advanced nursing practice role competencies through immersion in a clinical practice setting.
Prerequisites: None.
Corequisites: None.
Registration Information: Variable credit course not required for all DNP Population Health students; determined through admission gap analysis. Repeatable (12).

NSG 712 Research & Evidence Based Practice 3(3-0)
Spring.
Expand knowledge to determine the best evidence and quality improvement methods to reduce risk and improve patient outcomes in the advanced nursing practice role.
Prerequisite: NSG 505.
Corequisite: None.
Registration Information: None.

NSG 714 Epidemiology 3(3-0)
Summer.
Examine theoretical and philosophic foundations for illness patterns, injury, and high-risk behaviors in individuals, aggregates, and populations using evidence-based nursing practice to influence health outcomes.
Prerequisite: NSG 505.
Corequisite: None.
Registration Information: None.

NSG 716 Health Care Business & Finance 4(3-3)
Fall.
Introduces the dynamics of financial theory and strategic management for establishing an advanced nursing practice.
Prerequisite: None.
Corequisite: None.
Registration Information: DNP 45 hours clinical required.

NSG 718 Organizational & Systems Leadership 4(3-3)
Spring.
Integrates organizational and systems leadership knowledge and skills to influence communication, productivity, health outcomes and practice excellence.
Prerequisite: None.
Corequisite: None.
Registration Information: DNP 45 hours clinical required.

NSG 748 Healthcare: Ethics, Law & Policy 4(3-3)
Spring.
Evaluate ethical, legal and political concepts in healthcare delivery systems.
Prerequisite: None.
Corequisite: None.
Registration Information: DNP 45 hours clinical required.

NSG 801 Doctor of Nursing Practice Seminar 1(1-0)
Fall, Summer.
Formulate a framework for a Doctoral Inquiry project proposal.
Prerequisite: NSG 505 and NSG 712 and NSG 716 and NSG 718 and NSG 748.
Corequisite: None.
Registration Information: Approval of instructor.

NSG 802 DNP Project Practicum I 3(2-3)
Fall.
Develop and defend scholarly DNP project proposal DNP clinical hours required.
Prerequisite: NSG 801.
Corequisite: None.
Registration Information: None.

NSG 803 DNP Project Practicum II 3(1-6)
Spring.
Develops the role of the DNP during clinical immersion while initiating a DNP project implementation in a designated multidisciplinary emphasis area. DNP clinical hours required.
Prerequisite: NSG 802.
Corequisite: None.
Registration Information: None.

NSG 804 DNP Project Practicum III 2(1-3)
Summer.
Analyze DNP project findings to prepare project defense and maintain clinical immersion. DNP clinical hours required.
Prerequisite: NSG 803.
Corequisite: None.
Registration Information: None.

NSG 805 DNP Project Practicum IV 3(1-6)
Fall.
Defend DNP project and disseminates findings. DNP clinical hours required.
Prerequisite: NSG 804.
Corequisite: None.
Registration Information: None.

NSG 806L Final DNP Practicum AGACNP 6(0-18)
Fall.
Integrate the DNP essentials into the advanced practice nursing role during an adult-gerontology acute care setting.
Prerequisite: NSG 805.
Corequisite: None.
Registration Information: None.

NSG 807L Final DNP Practicum AGACNP/FNP 10(0-30)
Spring.
Integrate the DNP essentials into the advanced practice nursing role during an adult-gerontology acute care and family setting.
Prerequisite: NSG 805.
Corequisite: None.
Registration Information: None.

NSG 808L Final DNP Practicum PMHNP 6(0-18)
Spring.
Integrate the DNP essentials into the advanced practice nursing role during a Psychiatric Mental Health clinical setting.
Prerequisite: NSG 805.
Corequisite: None.
Registration Information: None.

NSG 809L MS NSG DNP Project Practicum (1-16 V)
Fall, Spring, Summer.
Develop, implement, analyze, defend and disseminate findings for a scholarly DNP clinical immersion change project. Develop the DNP role in a multidisciplinary clinical emphasis area.
Prerequisite: NSG 801.
Corequisite: None.
Registration Information: Repeatable (16).

NSG 810L DNP Project Practicum 1(0-3)
Fall, Spring, Summer.
Analyze, defend and disseminate findings for a scholarly DNP clinical immersion change project. Develop the DNP role in a multidisciplinary clinical emphasis area.
Prerequisite: NSG 806L or NSG 807L or NSG 808L or NSG 809L.
Corequisite: None.
Registration Information: Repeatable (3).

Philosophy (PHIL)

PHIL 102 Philosophical Literature (GT-AH3) 3(3-0)
Fall, Spring.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H, GT-AH3)

PHIL 107 Intro to Religious Studies (GT-AH3) 3(3-0)
Fall, Spring.
An introduction to the study of religion, including theories, methods, and practices that scholars employ as they investigate religion.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H, GT-AH3) (CC)

PHIL 120 Islam and Non-Western Religions (GT-AH3) 3(3-0)
Fall, Spring.
A study of major world religions including Buddhism, Confucianism, Hinduism, Islam, Jainism, Sikhism, Shinto, Taoism, Zoroastrianism.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H, GT-AH3) (CC)

PHIL 201 Classics in Ethics (GT-AH3) 3(3-0)
Fall, Spring.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H, GT-AH3)

PHIL 204 Critical Reasoning (GT-AH3) 3(3-0)
Fall, Spring.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H, GT-AH3)

PHIL 205 Deductive Logic (GT-AH3) 3(3-0)
Fall, Spring.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H, GT-AH3)

PHIL 280 The Ancients: Person, Polis, Cosmos 3(3-0)
As Needed.
Exploration of the ancient origins of Western philosophy with an emphasis on the Presocratics, the Sophists, Socrates, Plato and Aristotle.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

PHIL 291 Special Topics (1-3 V)
As Needed.
Students who have an area of special interest are encouraged to contact the department. Special topics and authors of philosophical interest.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (12).

PHIL 295 Independent Study (1-3 V)
As Needed.
Specialized study of select persons, ideas, schools, historical trends or problems in philosophy.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (9).

PHIL 491 Special Topics (1-3 V)
As Needed.
Special topics and authors of philosophical interest. Students who have an area of special interest are encouraged to contact the department.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (12).

PHIL 495 Independent Study (1-3 V)
As Needed.
Specialized study of select persons, ideas, schools, historical trends or problems in philosophy.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (9).

PHIL 498 Internship (3-6 V)
As Needed.
Practical experience through internship with libraries, charitable groups, and other community organizations.
Prerequisite: None.
Corequisites: None.
Registration Information: For advanced students. Junior or senior status recommended. Departmental permission required.

Physics/Physical Science (PHYS)

A grade of C or better is required for prerequisite courses.

PHYS 110 Astronomy (GT-SC2) 3(3-0)
Fall, Spring.
Solar system, including motions of the planets, eclipses, and satellite exploration; classification and evolution of stars; clusters, nebulae, galaxies and the expanding universe.
Prerequisite: MATH 096.
Corequisite: None.
Registration Information: Satisfactory placement score.
(Gen Ed: ST, GT-SC2)

PHYS 110L Astronomy Lab (GT-SC1) 1(0-2)
Fall, Spring.
Laboratory course to accompany PHYS 110.
Prerequisite: None.
Corequisite: None.
Registration Information: PHYS 110 strongly recommended as prerequisite.
(Gen Ed: ST, GT-SC1)

PHYS 140 Light, Energy, & the Atom (GT-SC2) 3(3-0)
As Needed.
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.
Prerequisite: MATH 096.
Corequisite: None.
Registration Information: Satisfactory placement score.
(Gen Ed: ST, GT-SC2)

PHYS 140L Light, Energy and the Atom Lab (GT-SC1) 1(0-2)
As Needed.
Optional laboratory to accompany PHYS 140. Experiments in light, solar energy, atomic and nuclear physics with emphasis on qualitative understanding of observations.
Prerequisite: None.
Corequisite: None.
Registration Information: PHYS 140 strongly recommended as co-requisite.
(Gen Ed: ST, GT-SC1)

PHYS 150 (CHEM 150) Elementary Concepts in Phys & Chem 4(3-2)
Spring.
Hands-on standards-based approach to understanding basic concepts of physics and chemistry. Integrated lecture, lab and discussion periods.
Prerequisite: None.
Corequisite: None.
Registration Information: Acceptance into Teacher Education Program.

PHYS 201 Principles of Physics I (GT-SC2) 3(3-0)
Fall, Spring, Summer.
Motion, forces, conservation of energy and momentum, wave motion, sound and heat. For engineering, technology, life sciences, and other interested students.
Prerequisite: MATH 120.
Corequisite: None.
Registration Information: Satisfactory math placement exam score. PHYS 201L strongly recommended as co-requisite.
(Gen Ed: ST, GT-SC2)

PHYS 201L Principles of Physics Lab I (GT-SC1) 1(0-2)
Fall, Spring, Summer.
Principles of Physics Lab I.
Prerequisite: None.
Corequisite: None.
Registration Information: PHYS 201 strongly recommended as corequisite.
(Gen Ed: ST, GT-SC1)

PHYS 202 Principles Of Physics II (GT-SC2) 3(3-0)
Fall, Spring.
Electrostatics, electromagnetism, light, atomic and nuclear physics.
Prerequisite: None.
Corequisite: None.
Registration Information: PHYS 201L strongly recommended as corequisite.
(Gen Ed: ST, GT-SC2)

PHYS 202L Principles Of Physics II Lab (GT-SC1) 1(0-2)
Fall, Spring.
Principles Of Physics II Lab.
Prerequisite: None.
Corequisite: None.
Registration Information: PHYS 202 strongly recommended as corequisite.
(Gen Ed: ST, GT-SC1)

PHYS 221 General Physics I 4(4-0)
Spring.
Newtonian mechanics, including linear and rotational dynamics, momentum, energy, gravitation, fluid mechanics, wave motion and thermodynamics. Uses the calculus and vector notation.
Prerequisite: MATH 126.
Corequisite: None.
Registration Information: PHYS 221L strongly recommended as corequisite.
(Gen Ed: ST, GT-SC2)

PHYS 221L General Physics I Lab (GT-SC1) 1(0-2)
Spring.
This course is the laboratory component of PHYS 221.
Prerequisite: None.
Corequisite: None.
Registration Information: PHYS 221 strongly recommended as corequisite.
(Gen Ed: ST, GT-SC1)

PHYS 222 General Physics II 4(4-0)
Fall.
Electrostatics, electromagnetism, elementary circuits, electrical oscillations, geometrical optics and the wave aspects of light.
Prerequisite: PHYS 221.
Corequisite: None.
Registration Information: PHYS 222L strongly recommended as corequisite.
(Gen Ed: ST, GT-SC2)

PHYS 222L General Physics II Lab (GT-SC1) 1(0-2)
Fall, Spring.
General Physics II Lab.
Prerequisite: None.
Corequisite: PHYS 222.
Registration Information: None.
(Gen Ed: ST, GT-SC1)

PHYS 291 Special Topics (1-4 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

PHYS 293 Seminar 1(1-0)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

PHYS 301 Analytical & Orbital Mechanics 4(4-0)
Fall, Even.
Statics & dynamics of particles & rigid bodies. Conservation principles, minimum principles, accelerated coordinate systems, Lagrangian & Hamiltonian methods. Applications to astrodynamics & oscillations applications.
Prerequisite: MATH 325 and MATH 337 and PHYS 221.
Corequisite: None.
Registration Information: None.

PHYS 321 Thermodynamics 3(3-0)
Spring, Odd.
Introduction to thermodynamic laws and principles, entropy, kinetic theory and statistical mechanics.
Prerequisite: PHYS 221.
Corequisite: None.
Registration Information: None.

PHYS 322 Advanced Laboratory - Thermo 1(0-2)
Fall, Even.
Teaches how and why experimental physics is done through experiments related to thermodynamics and energy; good record keeping, data analysis, modeling and reporting of results.
Prerequisite: MATH 242 and PHYS 321.
Corequisite: None.
Registration Information: Repeatable (2).

PHYS 323 General Physics III 4(4-0)
Fall, Even.
Introduction to special relativity, kinetic theory, quantization, wave mechanics, atomic structure, nuclear physics and spectroscopy.
Prerequisite: MATH 224 and PHYS 222 and PHYS 222L.
Corequisite: None.
Registration Information: PHYS 323 Lab strongly recommended.

PHYS 323L General Physics III Lab 1(0-2)
Spring.
Teaches how and why experimental physics is done through representive experiments related to PHYS 323 topics; techniques of good record keeping, data analysis, modeling, instrumentation and presentation of results.
Prerequisite: MATH 242.
Corequisite: None.
Registration Information: PHYS 323 strongly recommended as corequisite.

PHYS 341 Optics 3(3-0)
Fall, Odd.
Geometrical optics, interference, diffraction, polarization of light, optical properties of materials, optical sources including lasers, and holography.
Prerequisite: MATH 325 and PHYS 222 and PHYS 222L.
Corequisite: None.
Registration Information: None.

PHYS 342 Advanced Laboratory-Optics 1(0-2)
Fall, Odd.
Develops skills, experience and independence in experimental research design, modeling, data analysis, instrumentation and presentation of results through experiments related to PHYS 341.
Prerequisite: MATH 242 and PHYS 341.
Corequisite: None.
Registration Information: Repeatable (2).

PHYS 431 Electricity & Magnetism 4(4-0)
Spring, Even.
Mathematical treatment of electrostatics, currents, magnetism, electromagnetic induction, Maxwell's equations and electrodynamics.
Prerequisite: MATH 325 and MATH 337 and PHYS 222 and PHYS 222L.
Corequisite: None.
Registration Information: None.

PHYS 432 Advanced Laboratory-Electricity and Magnetism 1(0-2)
Spring, Even.
Develops skills, experience and independence in experimental research design, modeling, data analysis, instrumentation and presentation of results through representative experiments related to PHYS 431.
Prerequisite: MATH 242 and PHYS 431.
Corequisite: None.
Registration Information: Repeatable (2).

PHYS 441 Quantum Mechanics 4(4-0)
Spring, Odd.
Wave packets, operators, the Schroedinger equation, eigenstates, angular momentum, spin, magnetic moments, Heisenberg formulation.
Prerequisite: MATH 325 and MATH 337 and PHYS 323 and PHYS 323L.
Corequisite: None.
Registration Information: None.

PHYS 480 Practicum in Laboratory Instruction 1(0-2)
As Needed.
Participation in laboratory instruction under the guidance of a staff member. Includes instruction on laboratory safety.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (2).

PHYS 491 Special Topics (1-4 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

PHYS 492 Research 1(0-2)
As Needed.
Research.
Prerequisite: None.
Corequisite: None.
Registration Information: Eight credits in upper-division PHYS courses. Repeatable (99).

PHYS 493 Seminar 1(1-0)
As Needed.
Class members report on recently published work or on their own research in physics or applied physics.
Prerequisite: None.
Corequisite: None.
Registration Information: Advanced standing with a major or minor in physics. Repeatable (2).

PHYS 495 Independent Study (1-2 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Permission of department chair. Repeatable (99).

PHYS 498 Internship (1-6 V)
As Needed.
Work experience using the discipline of physics under the direction of the selected organization and a faculty member.
Prerequisite: None.
Corequisite: None.
Registration Information: Junior or senior standing. Permission of department chair. Repeatable (99).

PHYS 499 Thesis Research 1(1-0)
As Needed.
Students write a research paper describing their own research.
Prerequisite: None.
Corequisite: None.
Registration Information: Senior standing. Repeatable (99).

Political Science (POLS)

POLS 101 American Government (GT-SS1) 3(3-0)
Fall, Spring.
An introduction to American government and politics, with attention to party politics, congressional behavior, the Constitution, the Supreme Court, civil liberties, civil rights, political economy, public policy, and more.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS1)

POLS 102 State & Local Government 3(3-0)
Spring.
State and local governments profoundly shape our communities, economies, schools, environments, and more. This course studies state and local politics and policy in the U.S., with special attention to Colorado governments.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS)

POLS 106 Race & Ethnicity in American Democracy (GT-SS1) 3(3-0)
Fall.
Understanding the theoretical conceptions of race and ethnicity in the United States and how these concepts inform notions of citizenship, group membership, political behavior, and policy outcomes across racial/ethnic groups.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS1)

POLS 201 International Relations (GT-SS1) 3(3-0)
Fall, Spring.
Introductory study of world affairs. Topics include: international economics, institutions, war, human rights, and the environment. Designed for students with no background in international relations.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS1) (CC)

POLS 202 Comparative Politics 3(3-0)
Fall.
Studies politics, political systems, and governance in various countries, from the UK and France to Mexico and China. The course emphasizes comparative analysis and understanding.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS) (CC)

POLS 230 War & Film 3(3-0)
Spring, Odd.
Exploration of the relationship between war, film, and political culture. Emphasizes portrayal of war through film and popular interpretation of historical events given this medium.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 231 Politics & Film 3(3-0)
Spring, Even.
Exploration of the relationship between politics, film, and political culture. Emphasizes portrayal of politics through film and popular interpretation of historical events given this medium.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 250 Political Analysis & Methods I 3(3-0)
Fall.
Introduction to methods and tools of research in political science, with a focus on causal inference, statistical inference, and the analysis of quantitative data.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 251 Political Analysis & Methods II 3(3-0)
Spring.
Workshop in political and policy analysis, with a focus on writing skills, critical data analysis, and independent research.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 270 Introduction to Homeland Security 3(3-0)
As Needed.
An overview of homeland security, key threats, challenges and potential responses.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 271 Terrorism 3(3-0)
Fall.
An examination of extremist groups and private violence in the context of monitoring, prevention, and responses.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 272 Critical Incident Management 3(3-0)
As Needed.
The policies and practices of local first responders, inter-agency relationships, political violence and unconventional weapons.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 275 Public Policy for Peace Officers 3(3-0)
As Needed.
Content on diversity, law, policy, communication, and police procedures.
Prerequisite: None.
Corequisites: None.
Registration Information: Course is reserved for Peace Officers completing the Police Academy. Credit is awarded concurrently in Criminology, Political Science, & Social Work.

POLS 291 Special Topics (1-3 V)
As Needed.
Study of Political Events.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

POLS 300 Political Parties and Elections 3(3-0)
As Needed.
Examines the organization and function of political parties and the roles of political parties, pressure groups, and public opinion in American elections.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 302 Latinos in American Democracy 3(3-0)
Spring, Even.
Understanding the formation of Latinos/Hispanics as a distinct ethnic-political group in American politics and how the political behavior of Latinos/Hispanics differs from other racial-ethnic groups.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

POLS 305 International Conflict 3(3-0)
Fall, Odd.
Introductory study of arguments related to the outbreak of violent international warfare. Emphasis on coercive bargaining, diplomacy, arms races, and contentious issues.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 306 Peace Studies 3(3-0)
Fall, Even.
Introductory study of arguments related to violent conflict prevention, mitigation, and resolution. Emphasis on international law, peacekeeping, peace building, ethics, and non-violent organization.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor.

POLS 312 Colorado Government & Politics 3(3-0)
As Needed.
Covers multidimensional features of CO state government - organization; constitutional foundations; change over time; direct and indirect impacts on daily life - and how structures shape state politics.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

POLS 322 (LEGL 322) American Constitutional Law 3(3-0)
Fall.
Survey of American constitutional law; emphasis on Supreme Court decisions defining the extent and limits and of governmental authority and the rights and liberties of individual citizens.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 323 (LEGL 323) Criminal Law & Procedure 3(3-0)
Spring.
Content and characteristics of criminal law and procedures. Roles and functions of persons and agencies involved in judicial administration.
Prerequisite: POLS 101.
Corequisites: None.
Registration Information: Permission of instructor.

POLS 324 (LEGL 324) Family Law 3(3-0)
Spring.
Survey of legal issues concerning domestic relations; Supreme Court decisions and legislative enactments.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 330 Introduction to Public Administration 3(3-0)
As Needed.
Role of public bureaucracy in modern society. Principles and processes of public administration, personnel management and administrative responsibility.
Prerequisite: POLS 101.
Corequisites: None.
Registration Information: Permission of instructor.

POLS 340 Public Policy 3(3-0)
Fall.
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: POLS 101.
Corequisites: None.
Registration Information: Permission of instructor.

POLS 350 Political Attitudes & Behavior 3(3-0)
Spring.
This course studies mass political attitudes, behavior, and psychology, including party identification and opinion formation. It also studies the effects of public opinion on democracy and methods of survey research.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 360 Media, Politics, & Power 3(3-0)
Fall, Odd.
Assesses the role U.S. media plays in holding power accountable in the digital age. Topics include agenda setting and issue framing, the impact of media on public opinion, and how political actors shape media narratives.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 370 Western Political Thought 3(3-0)
Spring.
Systematic survey of political thought from beginnings in Ancient Near East to present. Emphasis on contributions relevant to contemporary political theory.
Prerequisite: POLS 101.
Corequisites: None.
Registration Information: Permission of instructor.

POLS 373 Intelligence & National Security 3(3-0)
As Needed.
Examines inter-agency relations as well as practical and political elements of domestic intelligence gathering.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 374 Homeland Security & the Law 3(3-0)
As Needed.
Explores the legal and constitutional aspects of homeland security and homeland defense.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 375 Threat & Strategic Planning 3(3-0)
As Needed.
Topics include the development of threat assessment and planning, public-private sector resource partnering and crisis communication.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 376 (LEGL 376) Cyber Law 3(3-0)
Spring.
Explore domestic and international law and policy governing cyber-related issues such as cybercrime, cyberwar, and the balance between civil liberties and national security in an electronic age.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 377 Political Leadership Analysis 3(3-0)
As Needed.
This course studies psychological theories of political leadership and decision making. It also considers a variety of methodological approaches to assessing political leaders at a distance.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

POLS 395 Independent Study (1-3 V)
As Needed.
Independent study involving specialized reading and research.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (6).

POLS 411 (LEGL 411) Congress & the Presidency 3(3-0)
Fall, Even.
Study of the powers, politics, and structure of the U.S. congress and presidency.
Prerequisite: POLS 101.
Corequisites: None.
Registration Information: Permission of instructor.

POLS 430 War & Film 3(3-0)
Spring, Odd.
Exploration of the relationship between war, film, and political culture. Emphasizes portrayal of war through film and popular interpretation of historical events given this medium.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 431 Politics & Film 3(3-0)
Spring, Even.
Exploration of the relationship between politics, film, and political culture. Emphasizes portrayal of politics through film and popular interpretation of historical events given this medium.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 440 Nationalism & Ethnic Conflict 3(3-0)
Spring.
Ethno-nationalist conflict characterizes many of the world's most intractable and violent conflicts. This course studies ethno-nationalist conflict and identity formation in countries around the world.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 445 Economic Development 3(3-0)
Spring.
What explains economic development and inequality? How does political economics vary between rich and poor countries? The course studies the political economy of development in both developed and developing nations.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 450 Democracy & Dictatorship 3(3-0)
Spring.
How do dictators and one-party regimes stay in power? Why do some democracies fail? This course studies comparative dictatorship, comparative democracy, and regime change.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 460 U.S. Foreign & Security Policy 3(3-0)
Fall, Odd.
Investigate ongoing contemporary issues, and explore arguments related to strategic policy, political leadership, military development and application, and policy evolution.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor.

POLS 473 American Political Thought 3(3-0)
As Needed.
Development of American segment of modern political thought from colonial times to present. Interrelationship of individuals, ideas and institutions shaping modern American political responses.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

POLS 480 Practicum in Politics and Public Service (1-6 V)
As Needed.
Practical experience as interns in governmental agencies, political parties, or legal offices.
Prerequisite: None.
Corequisites: None.
Registration Information: For advanced students. Departmental permission required.

POLS 491 Special Topics (1-3 V)
As Needed.
Special topics in political science.
Prerequisite: None.
Corequisites: None.
Registration Information: Lower division courses in Political Science are recommended. Repeatable (99).

POLS 492 Research (1-3 V)
As Needed.
Individual research project under the supervision and direction of a faculty member resulting in a thesis, or research with a faculty member resulting in a similar work product.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (6).

POLS 493 Seminar (1-3 V)
Spring.
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: POLS 250 and POLS 370.
Corequisites: None.
Registration Information: Permission of instructor.

POLS 495 Independent Study (1-3 V)
As Needed.
An individualized program of study designed by a ranked faculty member in the political science program and approved by the program coordinator.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

POLS 498 Internship (3-6 V)
As Needed.
Practical experience as interns in governmental agencies, political parties, or legal offices.
Prerequisites: None.
Corequisites: None.
Registration Information: For advanced students. Departmental permission required. Repeatable (12).

POLS 510 Public and Nonprofit Leadership (3 V)
Spring.
Theories of leadership and management how they apply to the public and nonprofit sectors. Covers topics such as motivation, fostering teamwork, conflict management, communication, volunteer management, and others.
Prerequisite: None.
Corequisites: None.
Registration Information: Admittance into CSU Pueblo's Online MBA program. Permission of instructor.

POLS 520 Public Budgeting & Financial Management 3(3-0)
As Needed.
Overview of public organization budgeting processes and issues such as accounting, procurement, cash flow management, and revenue projection. Nonprofit fundraising, as well as grant writing/grants management, also covered.
Prerequisite: None.
Corequisites: None.
Registration Information: Admittance into CSU-Pueblo's Online MBA program, or permission of the instructor required.

POLS 530 Essentials of Public and Nonprofit Management 3(3-0)
As Needed.
Historical and political overview of the scope of public and nonprofit sectors, as well as theories of public and nonprofit management/leadership, public organizational behavior, and accountability/ethics.
Prerequisite: None.
Corequisites: None.
Registration Information: Admittance into CSU-Pueblo's Online MBA program, or permission of the instructor required.

POLS 540 The Public Policy Process 3(3-0)
As Needed.
Overview of policymaking processes, including agenda setting, policy formation, and implementation, and evaluation. Special attention will be paid to how these process work in specific policy domains that impact business.
Prerequisite: None.
Corequisites: None.
Registration Information: Admittance into CSU-Pueblo's Online MBA program, or permission of the instructor required.

POLS 591 Special Topics (1-3 V)
As Needed.
Special topics in political science.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of program coordinator. Repeatable (99).

POLS 595 Independent Study (1-3 V)
As Needed.
An individualized program of study designed by a ranked faculty member in the political science program and approved by the program coordinator.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of program coordinator. Repeatable (99).

President's Leadership Program (PLP)

PLP 160 Principles of Leadership 3(3-0)
Fall.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: Acceptance into President's Leadership Program.

PLP 260 Leadership in Service Organizations 3(2-2)
Fall.
Lecture/experiential course outlining leadership practices through service learning in community settings.
Prerequisites: PLP 160.
Corequisites: None.
Registration Information: Acceptance into President's Leadership Program.

PLP 350 Contemporary Leadership (3 V)
As Needed.
Introduces leadership models, with a focus on contemporary leadership styles. Topics include effective and dysfunctional leader behaviors, ethics and values, personal mission and vision statements.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

PLP 360 Applied Leadership 3(3-0)
Fall.
Leadership in action course applying needs assessments, analysis, strategy development, implementation and evaluation to a team project in private, public or nonprofit sector.
Prerequisites: PLP 260.
Corequisites: None.
Registration Information: Acceptance into President's Leadership Program.

PLP 460 Working with Experienced Leaders 3(1-4)
Fall.
Lecture/practicum course assigning students to leader mentorship in public, private, or government sector. Leadership issues and challenges in a structured, but applied setting.
Prerequisites: PLP 360.
Corequisites: None.
Registration Information: Acceptance into President's Leadership Program.

PLP 489 Field Placement in Leadership 3(0-3)
Spring, Summer.
A semester-long internship where students take on a supervised leadership role within an organization.
Prerequisites: PLP 160 and PLP 260 and PLP 360.
Corequisites: None.
Registration Information: Acceptance into President's Leadership Program.

PLP 491 Special Topics (1-3 V)
As Needed.
Special topics are offered to students in areas where regular course offerings are not available.
Prerequisites: None.
Corequisites: None.
Registration Information: Junior or senior standing. Permission of instructor.

Psychology (PSYC)

A grade of C or better is required for prerequisite courses.

PSYC 100 General Psychology (GT-SS3) 3(3-0)
Fall, Spring, Summer.
Overview of the field of psychology including learning, perception, motivation, emotion, heredity, personality, development, abnormal and psycho-therapy.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS3)

PSYC 103 Introductory Psychology for Majors 3(3-0)
Fall, Spring.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

PSYC 105 (ANTH 105, DS 105, SOC 105, WS 105) Understanding Human Diversity 3(3-0)
As Needed.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

PSYC 151 Human Development (GT-SS3) 3(3-0)
Fall, Spring, Summer.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS3)

PSYC 205 Introduction to Sport Psychology 3(3-0)
Fall.
An introduction to psychological theories and constructs affecting performance, coaching & development in sports and athletics.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

PSYC 207 Quantitative Research Methods I 3(3-0)
Fall, Spring.
Introduction to research development and use of quantitative methods.
Prerequisite: PSYC 100 and PSYC 103.
Corequisites: PSYC 207L.
Registration Information: General Education Math strongly recommended as prerequisite.

PSYC 207L Quantitative Research Methods Lab I 1(0-1)
Fall, Spring.
Introduction to methods of psychological experimentation.
Prerequisite: PSYC 100 and PSYC 103.
Corequisites: PSYC 207.
Registration Information: General Education Math strongly suggested as prerequisite.

PSYC 209 Quantitative Research II 3(3-0)
Fall, Spring.
Continuation of PSYC 207. Focus on research development and quantitative methods.
Prerequisite: PSYC 100 and PSYC 103 and PSYC 207 and PSYC 207L.
Corequisites: PSYC 209L.
Registration Information: General Education Math strongly recommended as prerequisite.

PSYC 209L Quantitative Research Methods Lab II 1(0-1)
Fall, Spring.
Continuation of Quantitative Research Methods Lab I.
Prerequisite: PSYC 100 and PSYC 103 and PSYC 207 and PSYC 207L.
Corequisites: PSYC 209.
Registration Information: General Education Math strongly recommended as prerequisite.

PSYC 212 (WS 212) Psychology of Diversity 3(3-0)
Fall.
To raise awareness of social inequities, promote cultural competency & appreciation of differences.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

PSYC 217 (MAE 217, WS 217) Women & Society 3(3-0)
As Needed.
Statistical overview of the current status of women, followed by examination of theories concerning equality of the sexes.
Prerequisite: PSYC 100.
Corequisite: None.
Registration Information: None.

PSYC 220 Drugs and Behavior 3(3-0)
Fall, Summer.
Principles of drug action with attention to beneficial and harmful uses of drugs.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

PSYC 222 Understanding Animal Behavior (GT-SS3) 3(3-0)
Spring.
Basic comparative and ethological perspectives regarding animal behavior. Scientific techniques for observation of animal behavior may be demonstrated at the Pueblo Zoo.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS3)

PSYC 231 (SOC 231) Marriage & Family Relationships 3(3-0)
Fall, Spring.
Marriage and family from an institutional and relationship perspective: cross-cultural diversity, mate selection, marital dynamics, parenting, divorce, remarriage, emerging patterns.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS)

PSYC 241 Human Sexuality 3(3-0)
Fall.
Psychological and biological aspects of human sexual behavior.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: Sophomore standing required.

PSYC 251 Childhood and Adolescence 3(3-0)
Fall, Spring.
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: PSYC 100.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS)

PSYC 291 Special Topics (1-4 V)
Fall, Spring, Summer.
Special Topics.
Prerequisite: None.
Corequisites: None.
Registration Information: Instructor permission required. Repeatable (6).

PSYC 311 Theories Of Personality 3(3-0)
Fall, Spring.
Major theories of personality and the methods of personality investigation.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 315 Industrial/Organizational Psychology 3(3-0)
Fall, Summer.
Application of the principles of psychology to the workplace, including personnel selection, motivation, group processes, leadership, job analysis, and organization.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 331 Physiological Psychology 3(3-0)
Fall, Spring.
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: PSYC 100.
Corequisites: PSYC 331L.
Registration Information: None.

PSYC 331L Physiological Psychology Lab 1(0-2)
Fall, Spring.
Physiological Psychology Lab.
Prerequisite: PSYC 100.
Corequisites: PSYC 331.
Registration Information: None.

PSYC 333 Animal Behavior & Cognition 3(3-0)
Fall.
Basic comparative and ethological perspectives regarding animal behavior. Scientific techniques for observation of animal behavior may be demonstrated at the Pueblo Zoo, the Nature and Wildlife Discovery Center, and in labs.
Prerequisites: PSYC 100.
Corequisites: PSYC 333L.
Registration Information: None.

PSYC 333L Animal Behavior & Cognition Lab 1(0-2)
Fall.
Basic comparative and ethological perspectives regarding animal behavior. Scientific techniques for observation of animal behavior may be demonstrated at the Pueblo Zoo, the Nature and Wildlife Discovery Center, and labs.
Prerequisites: PSYC 100.
Corequisites: PSYC 333.
Registration Information: None.

PSYC 334 Perception 3(3-0)
Fall, Spring.
Senses & how they cooperate w/ the brain to provide awareness & knowledge of world about us. Empirical findings & theoretical analysis of processing five senses. Role of learning in normal & illusory perception considered.
Prerequisite: PSYC 100.
Corequisites: PSYC 334L.
Registration Information: None.

PSYC 334L Perception Lab 1(0-2)
Fall, Spring.
Perception Lab.
Prerequisite: PSYC 100.
Corequisites: PSYC 334.
Registration Information: None.

PSYC 336 Learning and Motivation 3(3-0)
Fall, Spring.
Principles of learning and memory. Empirical findings and theoretical analyses of topics including conditioning, reinforcement and punishment. Research and application.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: Permission of instructor.

PSYC 337 Memory and Cognition 3(3-0)
Fall, Spring.
Theory and research on current topics in cognition, including attention, concept formation, imagery, memory, decision making, language acquisition, problem solving and text comprehension.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 342 Educational Psychology 3(3-0)
Fall, Spring.
The contribution of psychology theory, research and methods to our understanding of teaching and learning.
Prerequisite: PSYC 100 or PSYC 151.
Corequisites: None.
Registration Information: None.

PSYC 351 Psychology of the Exceptional Individual 3(3-0)
Fall.
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: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 352 (SOC 352) Social Psychology 3(3-0)
Fall, Spring.
General and applied psychological principles of the individual's interaction with a group.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 360 Forensic Psychology 3(3-0)
Fall, Spring.
Using social, cognitive, and clinical perspectives, this course will examine individual and interpersonal phenomenon related to memory, judgment, psychological testing, bias, and social influence in the legal field.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 362 Abnormal Psychology 3(3-0)
Fall, Spring, Summer.
Etiology, diagnosis and therapy of maladaptive or abnormal behaviors and mental functioning.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 380 Nutrition for Mental Health Fundamentals 3(3-0)
As Needed.
Explores fundamental concepts for the study of nutrition for mental health, including nutrients, the gut-brain-immune axis, HPA axis, hormones, neurotransmitters, and other related factors, with a focus on emerging research.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

PSYC 382 Personal Food Relationships 3(3-0)
As Needed.
This course explores the value and importance of our personal relationships with food, the scope and impact of diet culture, and the evidence-based practices of Mindful Eating and Intuitive Eating.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

PSYC 384 Food Psychology 3(3-0)
As Needed.
This course explores why we eat the way we do, the complexity of personal food relationships, and the importance of a comprehensive, multidimensional approach for understanding and influencing eating behavior.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

PSYC 401 History and Systems of Psychology 3(3-0)
Fall, Spring.
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: PSYC 100 and PSYC 209 and PSYC 209L.
Corequisites: None.
Registration Information: None.

PSYC 403 Emotional Intelligence 3(3-0)
Fall.
This course examines scientific research from the fields of Affective Neuroscience, Personality and Positive Psychology regarding emotional intelligence, specifically: emotional awareness, expressivity, motivation and regulation.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 405 Positive Psychology 3(3-0)
Fall.
This course examines the latest scientific research constituting positive psychology. Topics include: Well-Being, Gratitude, Empathy, Forgiveness, Hope, Resilience, and Humor.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

PSYC 428 Cannabinoids as Medicine 3(3-0)
Fall, Spring.
The Cannabis plant has a long history of medical use. This course is intended to be a unique experience to help students to develop a broad understanding of cannabis and its medical uses.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

PSYC 452 (SOC 452) The Individual & Society 3(3-0)
As Needed.
How does our society shape the way we define ourselves and others? This class explores the relationship between the individual and society, and how that relationship affects the choices we make and the actions we take.
Prerequisites: PSYC 100 or PSYC 352 or SOC 101 or SOC 352.
Corequisites: None.
Registration Information: None.

PSYC 463 Psychopathology of Childhood 3(3-0)
Fall.
A survey of the unique conceptual models of etiology, assessment and therapy appropriate to the study of the psychological disorders of childhood.
Prerequisite: PSYC 100 and PSYC 362.
Corequisites: None.
Registration Information: None.

PSYC 464 Systems of Counseling and Psycho-Therapy 3(3-0)
Fall.
Traditional and contemporary theories of counseling and psychotherapy through use of case studies and other selected materials.
Prerequisite: PSYC 100 and PSYC 311 and PSYC 362.
Corequisites: PSYC 464L.
Registration Information: Permission of instructor.

PSYC 464L Systems of Counselng & Psycho-therapy Lab 1(0-2)
Fall.
Systems of Counseling & Psycho-therapy Lab.
Prerequisite: PSYC 100 and PSYC 311 and PSYC 362.
Corequisites: PSYC 464.
Registration Information: None.

PSYC 465 Behavior Modification 3(3-0)
Spring.
Advanced methods and techniques of behavior modification as practiced in various agencies and institutions.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: Junior or senior standing required.

PSYC 471 Clinical Psychology 3(3-0)
Spring.
Survey of clinical psychology as a profession. Training requirements, opportunities, future directions, current research and ethical problems.
Prerequisite: PSYC 100 and PSYC 362.
Corequisites: None.
Registration Information: Junior or senior standing required.

PSYC 475 Group Process 3(3-0)
Spring.
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: PSYC 100 and PSYC 311 and PSYC 362 and PSYC 464 and PSYC 464L.
Corequisites: None.
Registration Information: Junior or senior standing required.

PSYC 481 Psychology of Trauma 3(3-0)
Fall.
This course is designed to introduce recent research about experienced trauma in individuals. Understanding the history of trauma, the physiological changes in the brain, and responses will be introduced.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor.

PSYC 484 Advanced Nutrition for Mental Health 3(3-0)
As Needed.
In-depth exploration of nutritional factors affective to specific neurological and psychological conditions, with a focus on current and emerging research.
Prerequisites: PSYC 380.
Corequisites: None.
Registration Information: None.

PSYC 486 Botanicals for Mental Health 3(3-0)
As Needed.
Exploration of botanicals and fungi used to manage, support, and treat various mental health conditions. Traditional knowledge systems are considered, then balanced against empirically supported practice.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

PSYC 491 Special Topics (1-3 V)
Fall, Spring, Summer.
Special Topics.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

PSYC 492 Research (1-3 V)
Fall, Spring, Summer.
Faculty directed research project for undergraduate student.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (3).

PSYC 494 Field Experience (1-12 V)
Fall, Spring, Summer.
In-depth, on-the-job experience in psychology, individually designed. Ability to use psychological tests and counseling techniques recommended.
Prerequisite: PSYC 100 and PSYC 311 and PSYC 362 and PSYC 464 and PSYC 464L.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (12).

PSYC 495 Independent Study (1-3 V)
Fall, Spring, Summer.
Independent Study.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (3).

Reading (RDG)

A grade of C or better is required for prerequisite courses.

RDG 099 Developmental Reading Skills (3 V)
As Needed.
Students will apply strategies for improving comprehension, developing vocabulary, and increasing rate for reading college textbooks.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

RDG 355 Linguistics for Educators 3(3-0)
As Needed.
Focus on linguistics, the study of the English language, particularly the subtopics of phonology, orthography, morphology, semantics, syntax, and pragmatics.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

RDG 360 Practicum (1-3 V)
As Needed.
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: None.
Corequisites: None.
Registration Information: Admission to School of Education.

RDG 410 Teaching Reading 3(3-0)
Fall, Spring.
Includes reading instruction, emphasizing methods and assessment strategies to meet K-6 Colorado content standards; 30 hours of field experience.
Prerequisites: RDG 355.
Corequisites: None.
Registration Information: Admission to School of Education.

RDG 411 Teaching Writing 2(2-0)
As Needed.
Focuses on writing instruction for P-12 students; 30 hrs. Field work required.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to the School of Education required. Successful completion of RDG 355 and RDG 410 strongly recommended.

RDG 435 Disciplinary Literacy 4(3-2)
As Needed.
Focuses on skills and strategies to help students read, write, speak, listen, and view as a professional within their discipline area. 60 hours of fieldwork required.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education.

RDG 450 Reading Assessment & Intervention 3(3-0)
As Needed.
Research-based assessment and instruction of reading, to include the five components of reading and best practices for reading intervention.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Completion of RDG 355 highly recommended.

RDG 491 Special Topics (1-3 V)
As Needed.
Special topics.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (30).

RDG 495 Independent Study (1-3 V)
As Needed.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (30).

RDG 501 Graduate Topics in Reading 0.5-3(0.5-3-0)
As Needed.
Graduate topics in reading. Each has a subtitle; no subtitle may be repeated for credit.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate standing. Counts for M.Ed. credit with approval of Program Director. Repeatable (99).

RDG 510 Foundations of Reading Instruction 3(3-0)
Fall, Spring.
Basic course for other graduate reading courses, including reading skills, sequence, materials, psychology of reading and relationship to other language arts.
Prerequisites: RDG 355 or RDG 555.
Corequisites: None.
Registration Information: Admission to School of Education.

RDG 511 Advanced Methods of Teaching Writing 2(2-0)
As Needed.
Focuses on advanced methods of teaching writing for P-12 students; 30 hrs. field work required.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to the School of Education required. Successful completion of RDG 555 and RDG 510 strongly recommended.

RDG 535 Advanced Disciplinary Literacy 3(3-0)
As Needed.
Focuses on advanced skills and strategies to help students read, write, speak, listen, and view as a professional within their discipline area. Field experience required.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education or graduate status.

RDG 550 Advanced Reading Assessment & Intervention 3(3-0)
As Needed.
Advanced methods of research-based assessment and instruction of reading, to include the five components of reading and best practices for reading intervention.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education or graduate status. Completion of RDG 555 highly recommended.

RDG 555 Advanced Linguistics for Educators 3(3-0)
Fall, Spring.
Focus on linguistics, the study of the English language, particularly the subtopics of phonology, orthography, morphology, semantics, syntax, and pragmatics.
Prerequisites: None.
Corequisites: None.
Registration Information: Admission to School of Education. Graduate standing.

RDG 560 Practicum (1-12 V)
As Needed.
Reading practicum in a setting appropriate for graduate level reading students.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (24).

RDG 591 Special Topics (1-3 V)
As Needed.
Special topics in reading.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (30).

RDG 594 Field Experience (1-12 V)
As Needed.
Field experience in an educational setting related to reading and teaching reading.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate standing. Repeatable (99).

RDG 595 Independent Study (1-6 V)
As Needed.
Independent Study.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate standing.

Science (SCI)

SCI 500 Workshop (1-4 V)
As Needed.
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: None.
Corequisite: None.
Registration Information: Graduate standing. Permission of instructor. Repeatable (99).

Social Science (SCSC)

SCSC 151 Society and Technology 3(3-0)
As Needed.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

SCSC 201 Introduction to Social Science 3(3-0)
As Needed.
Examines the different disciplines that make up the social sciences with particular emphasis on their interrelationships. Study of source materials as well as methods employed.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

SCSC 209 African American Studies 3(3-0)
As Needed.
Overview of the historical, political, and socio-cultural experiences of African Americans.
Prerequisites: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS) (CC)

SCSC 301 Social Science Methods 3(3-0)
As Needed.
Examines the logic of research and major research methods used in the social sciences; explores their links to theory and their application in research projects.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

SCSC 493 Seminar 3(3-0)
As Needed.
In-depth study of special topics in the social sciences. Emphasis on critical inquiry and holistic understanding of stability, change, and challenges within a global context.
Prerequisites: None.
Corequisites: None.
Registration Information: Repeatable (99).

SCSC 591 Special Topics 2(2-0)
As Needed.
Topics identified by subtitles taught.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate standing. Repeatable (99).

SCSC 593 Seminar 2(2-0)
As Needed.
Various problems within the realm of social science, utilizing an integrated approach. For majors in broad area social science disciplines.
Prerequisites: None.
Corequisites: None.
Registration Information: Graduate standing. Repeatable (99).

Social Work (SW)

A grade of C or better is required for prerequisite courses.

SW 100 Introduction to Social Work 3(3-0)
Fall, Spring, Summer.
Introduction to the history and philosophy of the social work profession including the knowledge, values, ethics, roles and skills inherent in social work practice.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SW 201 Human Behavior and Social Environment I 3(3-0)
Fall, Summer.
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: None.
Corequisites: PSYC 100 and/or SOC 101 and SW 100.
Registration Information: None.

SW 202 Human Behavior and Social Environment II 3(3-0)
Spring, Summer.
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.
Corequisites: None.
Registration Information: None.

SW 205 Social Welfare in the United States (GT-SS1) 3(3-0)
Fall, Spring, Summer.
Examines the historical development of social work in the United States social welfare system. Critical thinking techniques will be used to analyze policy.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS1)

SW 210 Statistics for Social Worker 3(3-0)
Fall, Spring.
Introduction to qualitative and quantitative data analysis. Emphasis on descriptive and inferential statistics most utilized in evidence-based social work practice and research.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SW 222 Introduction to Community Practice 3(2-2)
Fall, Spring.
Application of the foundation of generalist practice skills. Requires 45 clock hours of volunteer work in an approved human service agency.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SW 225 Social Work Policies and Procedures 1(1-0)
Fall, Spring, Summer.
Provides fundamental knowledge for social work majors. Includes ethics, handbook, and standards.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SW 230 (CS 230) Chicano: Social and Psychological Study (GT-SS3) 3(3-0)
Fall.
Social and psychological forces present in the Chicano community.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS3) (CC)

SW 275 Special Populations for Peace Officers 3(3-0)
As Needed.
Content on diversity, law, policy, communication, and police procedures. Course is reserved for Peace Officers completing the Police Academy. Credit is awarded concurrently in CRIM, POLS, & SW.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SW 290 Special Projects (1-5 V)
As Needed.
Special Projects.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

SW 301 Professional Writing in Social Work 3(3-0)
Fall, Summer.
Ethical and professional documentation for case records and publication in social work practice. Emphasis on current documentation practices and APA writing.
Prerequisite: PSYC 100 and SOC 101 and SW 100 and SW 201 and SW 202 and SW 205.
Corequisite: None. Registration Information: A course in human biology, a political science OR economics course with grade of C or higher. Social Work Major GPA of 2.5 or higher.

SW 310 Social Work Theory 3(3-0)
Fall, Summer.
A comparative approach to explanatory and practice theories relating to social work and the helping professions.
Prerequisite: PSYC 100 and SOC 101 and SW 100 and SW 201 and SW 202 and SW 205.
Corequisites: None.
Registration Information: A course in human biology, a political science OR economics course with grade of C or higher. Social Work Major GPA of 2.5 or higher.

SW 320 Human Diversity in Practice 3(3-0)
Spring.
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: PSYC 100 and SOC 101 and SW 100 and SW 201 and SW 202 and SW 205.
Corequisites: CS 101 or CS 230.
Registration Information: A course in human biology, a political science OR economics course, and a course in Women's studies with grade of C or higher. Social Work Major GPA of 2.5 or higher.

SW 322 Social Work Intervention I 3(3-0)
Fall, Summer.
Elements of generalist micro social work practice and theory. Skill development in assessment, intervention, and evaluation emphasized.
Prerequisite: PSYC 100 and SOC 101 and SW 100 and SW 201 and SW 202 and SW 205.
Corequisites: None.
Registration Information: A course in human biology, a political science OR economics course with grade of C or higher. Social Work Major GPA of 2.5 or higher.

SW 323 Social Work Intervention II 3(3-0)
Spring.
Generalist mezzo social work practice focusing on small groups and families. Includes assessment, intervention, evaluation, and practice theory.
Prerequisite: PSYC 100 and SOC 101 and SW 100 and SW 201 and SW 202 and SW 205.
Corequisites: None.
Registration Information: A course in human biology, a political science OR economics course with grade of C or higher. Social Work Major GPA of 2.5 or higher.

SW 324 Social Work Intervention III 3(3-0)
Spring, Summer.
Social work theories and interventions at the macro level; community and organization generalist practice.
Prerequisite: PSYC 100 and SOC 101 and SW 100 and SW 201 and SW 202 and SW 205.
Corequisites: None.
Registration Information: A course in human biology, a political science OR economics course with grade of C or higher. Social Work Major GPA of 2.5 or higher.

SW 325 (CS 325) Health in the Chicano Community 3(3-0)
Spring.
Health care traditions and current health care systems in the barrio.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SW 326 SW Practice with Older Adults 3(3-0)
As Needed.
The biological, psychological, social, cultural and spiritual aspects of aging and the services affecting them.
Prerequisite: None.
Corequisites: None.
Registration Information: Junior standing or consent from instructor.

SW 327 Child Welfare 3(3-0)
As Needed.
The physical, behavioral, emotional signs of child abuse and neglect; laws designed to protect children, and services available to assist them.
Prerequisite: None.
Corequisites: None.
Registration Information: Junior standing. Permission of instructor.

SW 328 Spirituality and Social Work 3(3-0)
As Needed.
Focus on spirituality as "making meaning" and its influence on the personal and professional aspects of social work education and practice.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SW 329 Rural Social Work 3(3-0)
As Needed.
Examines rural practice, recognizing the integral values of this environment, with an ecological emphasis on clients and their connections in micro, mezzo, and macro systems. Required for IV-E stipend students.
Prerequisite: None.
Corequisites: None.
Registration Information: Junior standing. Permission of instructor.

SW 331 Campus Connections 3(1-2)
Fall, Spring.
This service-learning course will engage students as mentors with local at-risk youth. The course will combine lab sessions working directly with youth with academic coursework that is both reflective and applied.
Prerequisite: None.
Corequisite: None.
Registration Information: Submit an application, attend an informational session, and pass a background check. Repeatable (9).

SW 340 Reintegration for Military Families 3(3-0)
As Needed.
Critically examines the history, culture, strengths, and barriers in social work practice with clients who have served in the military and their family members.
Prerequisite: SW 100.
Corequisites: None.
Registration Information: None.

SW 341 Impact of Trauma in Social Work 3(3-0)
As Needed.
Focus on the dimensions of "trauma," formulating client assessments based on research, and evaluating impact of trauma/secondary effects on oneself as a professional helper. Required for IV-E Stipend students.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SW 350 Social Welfare Policy 3(3-0)
Fall.
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: PSYC 100 and SOC 101 and SW 100 and SW 201 and SW 202 and SW 205.
Corequisites: None.
Registration Information: A course in human biology, a political science OR economics course with grade of C or higher. Social Work Major GPA of 2.5 or higher.

SW 481 Placement Seminar I 3(3-0)
Fall.
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 100 and SW 201 and SW 202 and SW 205 and SW 301 and SW 310 and SW 320 and SW 322 and SW 323 and SW 324 and SW 350.
Corequisites: SW 488.
Registration Information: Admission to Field. Social Work major GPA of 2.5 or higher.

SW 482 Placement Seminar II 3(3-0)
Spring.
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 100 and SW 201 and SW 202 and SW 205 and SW 225 and SW 301 and SW 310 and SW 320 and SW 322 and SW 323 and SW 324 and SW 350 and SW 481 and SW 488.
Corequisites: SW 489.
Registration Information: Admission to field. Social Work major GPA of 2.5 or higher.

SW 488 Placement I 5(0-16)
Fall.
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: None.
Corequisites: SW 481.
Registration Information: Admission to the Social Work Program.

SW 489 Placement II 5(0-16)
Spring.
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: None.
Corequisites: SW 482.
Registration Information: None.

SW 490 Special Projects (1-5 V)
As Needed.
Special Projects.
Prerequisite: None.
Corequisites: None.
Registration Information: Admission to the Social Work Program. Permission of instructor. Repeatable (99).

SW 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

SW 492 Research 3(3-0)
Fall.
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 100 and SW 201 and SW 202 and SW 205 and SW 301 and SW 310 and SW 320 and SW 322 and SW 323 and SW 324 and SW 350.
Corequisite: SW 499.
Registration Information: Instructor permission. Statistics course strongly recommended as prerequisite.

SW 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

SW 499 Research Lab 1(0-1)
Fall.
This course is the required 1-credit project-based lab.
Prerequisite: None.
Corequisites: SW 492.
Registration Information: Admission to Social Work Program.

SW 501 Holistic Human Behavior 3(3-0)
Fall.
Understanding human behavior in the environment. Includes assessment models with emphasis on systems theory and developmental theories.
Prerequisite: None.
Corequisites: SW 502 and SW 502L and SW 520.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 502 Introduction to Social Work & Ethics 3(3-0)
Fall.
Utilizes the NASW Code of Ethics and ethical decision-making models for ethical practice.
Prerequisite: None.
Corequisites: SW 501 and SW 502L and SW 520.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 502L Introduction to Social Work & Ethics Lab 1(0-1)
Fall.
The course introduces students to the practice of social work as well as utilizes the NASW Code of Ethics to help students understand the ethical decision making process through case examples.
Prerequisite: None.
Corequisites: SW 501 and SW 502 and SW 520.
Registration Information: None.

SW 520 Diversity in the Human Experience 3(3-0)
Fall.
Explores diversity of humans and effects in social work practice.
Prerequisite: None.
Corequisites: SW 501 and SW 502 and SW 502L.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 522 Intervention with Individuals 3(3-0)
Spring.
Examines the theories and modalities of assessing and intervening with individuals.
Prerequisite: SW 501 and SW 502 and SW 502L and SW 520.
Corequisites: SW 523 and SW 581 and SW 588.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 523 Intervention with Families & Groups 3(3-0)
Spring.
Examines the theories and modalities of assessing and intervening with families and small groups.
Prerequisite: SW 501 and SW 502 and SW 502L and SW 520 and SW 550.
Corequisites: SW 522 and SW 581 and SW 588.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 524 Intervention with Agency-Community 3(3-0)
Summer.
Examines the theories and modalities of assessing and intervening with organizations and communities.
Prerequisite: SW 501 and SW 502 and SW 502L and SW 520 and SW 522 and SW 523 and SW 581 and SW 588.
Corequisites: SW 550 and SW 582 and SW 589.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 550 Social Welfare Policy & Practice 3(3-0)
Summer.
Studies the history and development of social welfare in the United States.
Prerequisite: SW 501 and SW 502 and SW 502L and SW 520 and SW 522 and SW 523 and SW 581 and SW 588.
Corequisites: SW 524 and SW 582 and SW 589.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 581 Seminar I 1(1-0)
Spring.
Integrative seminar addressing professional social work practice issues concurrent with Practicum I.
Prerequisite: SW 501 and SW 502 and SW 502L and SW 520.
Corequisites: SW 522 and SW 523 and SW 588.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 582 Seminar II 1(1-0)
Summer.
Integrative seminar addressing professional social work practice issues concurrent with Practicum II.
Prerequisite: SW 501 and SW 502 and SW 502L and SW 520 and SW 522 and SW 523 and SW 581 and SW 588.
Corequisites: SW 524 and SW 550 and SW 589.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 588 Practicum I 3(3-0)
Spring.
Placement in approved practice setting under MSW supervision for at least 224 clock hours.
Prerequisite: SW 501 and SW 502 and 502L and SW 520.
Corequisites: SW 522 and SW 523 and SW 581.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 589 Practicum II 3(3-0)
Summer.
Placement in approved practice setting under MSW supervision for at least 224 clock hours.
Prerequisite: SW 501 and SW 502 and SW 502L and SW 520 and SW 522 and SW 523 and SW 581 and SW 588.
Corequisites: SW 524 and SW 550 and SW 582.
Registration Information: Admission to Generalist MSW Year. Permission of instructor.

SW 622 Assess/Intervene with Individuals 3(3-0)
Fall.
Assessment theories and therapeutic interventions in clinical practice with individuals; includes DSM.
Prerequisite: None.
Corequisites: SW 625 and SW 681 and SW 688.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 624 Assess/Intervene Group/Agency/Community 3(3-0)
Spring.
Theories and models of assessment and intervention in mezzo and macro environments.
Prerequisite: SW 622 and SW 625 and SW 681 and SW 688.
Corequisites: SW 682 and SW 685 and SW 689.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 625 Assess/Intervene with Child/Family 3(3-0)
Fall.
Theories and models of assessment and intervention with children and families. Includes the DSM.
Prerequisite: None.
Corequisite: SW 622 and SW 681 and SW 688.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 641 Understanding Trauma in Practice 3(3-0)
Summer.
Examines the effects of trauma on clients and practitioners. Includes self-care.
Prerequisite: None.
Corequisites: SW 642 and SW 650 and SW 687.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 642 Administration & Supervision 3(3-0)
Summer.
Covers management models, budgeting, administrative functions and models of clinical and nonclinical supervision.
Prerequisite: SW 622 and SW 624 and SW 625 and SW 681 and SW 682 and SW 685 and SW 688 and SW 689.
Corequisites: SW 650 and SW 687.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 643 School Social Work 3(3-0)
Summer.
The role of a School Social Worker is covered. Topics include working with students, group curriculum, and IEPs, 504s, Behavior Intervention Plans, and Functional Behavioral. Assessments satisfy CO school SW guidelines.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

SW 644 Understanding Suicide 3(3-0)
Summer.
Course integrates knowledge, values, skills, and theories related to the impact of suicide on a micro, mezzo, macro level related to social work practice through the examination of diverse populations.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

SW 650 Advanced Policy in a Diverse World 3(3-0)
Summer.
Examines national and international social and public policies. Includes policy analysis and practice.
Prerequisite: SW 622 and SW 624 and SW 625 and SW 681 and SW 682 and SW 685 and SW 688 and SW 689.
Corequisites: SW 642 and SW 687.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 681 Seminar III 1(1-0)
Fall.
Integrative seminar addressing professional social work practice issues concurrent with Practicum III.
Prerequisite: None.
Corequisite: SW 622 and SW 625 and SW 688.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 682 Seminar IV 1(1-0)
Spring.
Integrative seminar addressing professional social work practice issues concurrent with Practicum IV.
Prerequisite: SW 622 and SW 625 and SW 681 and SW 688.
Corequisite: SW 624 and SW 685 and SW 689.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 685 Research in Practice & Agencies 3(3-0)
Spring.
Covers practice and agency evaluation.
Prerequisite: SW 622 and SW 625 and SW 681 and SW 688.
Corequisites: SW 624 and SW 682 and SW 689.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 687 Culminating Project 1(0-4)
Summer.
Present poster of completed integrated, action research project in public setting.
Prerequisite: SW 622 and SW 624 and SW 625 and SW 681 and SW 682 and SW 685 and SW 688 and SW 689.
Corequisites: SW 642 and SW 650.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 688 Practicum III 3(3-0)
Fall.
Placement in approved practice setting under MSW supervision for at least 250 clock hours.
Prerequisite: None.
Corequisite: SW 622 and SW 625 and SW 641 and SW 681.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 689 Practicum IV 3(3-0)
Spring.
Placement in approved practice setting under MSW supervision for at least 250 clock hours.
Prerequisite: SW 622 and SW 625 and SW 681 and SW 688.
Corequisites: SW 624 and SW 682 and SW 685.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

SW 691 Special Topics 3(3-0)
As Needed.
Graduate level of study designed to increase understanding in areas not covered by the core MSW courses.
Prerequisite: None
Corequisites: None.
Registration Information: Admission to Specialized MSW Year or BSW degree. Permission of instructor.

Sociology (SOC)

SOC 101 Introduction to Sociology (GT-SS3) 3(3-0)
Fall, Spring, Summer.
The scientific study of patterns and processes of human social relations.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS3)

SOC 105 (ANTH 105, DS 105, PSYC 105, WS 105) Understanding Human Diversity 3(3-0)
As Needed.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 201 Social Problems (GT-SS1) 3(3-0)
Fall.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS, GT-SS1)

SOC 203 (CRIM 203) The Criminal Justice System 3(3-0)
Spring.
Critical study of the U.S. criminal justice system, its historical, social & institutional context, & its structure & functioning. Influence of law, process & social justice on police, court, corrections, & victim services.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 205 (CRIM 205) Research Methods 3(3-0)
Fall, Spring.
Introduces methods of research and investigation in sociology, criminology, and the social sciences.
Prerequisite: CRIM 101 or SOC 101.
Corequisites: None.
Registration Information: None.

SOC 231 (PSYC 231) Marriage & Family Relationships 3(3-0)
Fall, Spring.
Marriage and family from an institutional and relationship perspective: cross-cultural diversity, mate selection, marital dynamics, parenting, divorce, remarriage, emerging patterns.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS)

SOC 248 Environmental Sociology 3(3-0)
As Needed.
We will use our sociological imaginations to explore the often puzzling relationships that humans all over the globe have developed with their environment.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 252 (CRIM 252) Understanding Lived Experiences 3(3-0)
As Needed.
Explores lived experiences using a sociological lens. Students learn to understand their own & others' lives in new ways through applying concepts such as social norms, stigma, social control, privilege & intersectionality.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 261 (CRIM 261) Introduction to Cannabis Studies 3(3-0)
Fall.
Introduces students to the social scientific study of cannabis and its complicated relationship to society. Emphasis on sociological and criminological topics including changes in the legal and popular perception of cannabis.
Prerequisite: None.
Corequisites: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

SOC 291 Special Topics (1-3 V)
As Needed.
Special topics in Sociology.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

SOC 302 Collective Behavior and Social Movements 3(3-0)
Spring.
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.
Corequisites: None.
Registration Information: None.

SOC 303 (CRIM 303) Deviance 3(3-0)
As Needed.
Patterns & causes associated with behavior, conditions, beliefs, & other social characteristics defined &/or treated as socially deviant, including but not limited to political, sexual, cultural, & organizational deviance.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 304 (CRIM 304) Race and Crime 3(3-0)
As Needed.
Explores historical and contemporary intersecting issues of race and crime in the United States. Theoretical grounding and factual information provide the foundation for the course.
Prerequisite: CRIM 101 or CRIM 203 or SOC 101 or SOC 203.
Corequisites: None.
Registration Information: None.

SOC 305 (CRIM 305, WS 305) Women & Crime 3(3-0)
As Needed.
A critical examination of the historical and contemporary intersecting issues of sex, gender, and crime, focusing on girls' and women's experiences as victims, offenders, and workers in the criminal justice system.
Prerequisite: ANTH 100 or CRIM 101 or SOC 101 or WS 100.
Corequisites: None.
Registration Information: None.

SOC 306 (CRIM 306) Delinquency and Juvenile Justice 3(3-0)
Fall.
Theoretical and historical study of delinquency, intersectionality, and social justice. Family, peer, school, community, and cultural contexts and juvenile law, courts, policing, and youth corrections are examined.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 310 Social & Cultural Theory 3(3-0)
Fall.
Classical to contemporary sociological theories are studied. A primary objective is to link sociological theory with what we experience in the social world and thus, to fuse theorizing with greater understanding of society.
Prerequisite: SOC 101.
Corequisites: None.
Registration Information: None.

SOC 312 Soc on the Fringe Cults & Conspiracy Theories 3(3-0)
As Needed.
This course will introduce students to core sociological theoretical frameworks as they relate to conspiracy “theories” and alternative new religions known as cults.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

SOC 314 (ANTH 314) Religion, Culture and Society 3(3-0)
As Needed.
Cross-cultural concepts and practices of the supernatural are studied. A holistic analysis to the role of religion in cultures and society.
Prerequisite: ANTH 100 or SOC 101.
Corequisites: None.
Registration Information: None.

SOC 315 (ANTH 315) Health, Culture, and Society 3(3-0)
Fall, Spring, Summer.
Cross-cultural concepts and approaches to health are studied. A holistic analysis of medicine as a cultural system as opposed to a biological one.
Prerequisite: ANTH 100 or SOC 101.
Corequisites: None.
Registration Information: None.

SOC 316 (ANTH 316) Age, Culture and Society 3(3-0)
As Needed.
Cross-cultural concepts and approaches to age are studied. A holistic analysis of the life course focusing on societal and cultural perceptions.
Prerequisite: ANTH 100 or SOC 101.
Corequisites: None.
Registration Information: None.

SOC 321 (ANTH 321, CRIM 321) Cross-Cultural Perspective on Crime 3(3-0)
As Needed.
An examination of crime in non-western societies with a comparison to crime and punishment in modern American society.
Prerequisite: ANTH 100 or CRIM 101 or SOC 101.
Corequisites: None.
Registration Information: None.

SOC 324 Race & Ethnic Relation 3(3-0)
Fall.
Social, political and historical conditions under which segregation, racial/ethnic hierarchies and r/e conflict emerge, and the institutions through which boundaries and hierarchies are produced and reproduced in the U.S.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 325 (WS 325) Gender And Society 3(3-0)
Summer.
Analysis of how gender as a social construct influences institutions, interaction & lived experience in a diverse society. The intersection of race, ethnicity, class & sexualities is viewed through the lens of gender & culture.
Prerequisite: SOC 101 or WS 100.
Corequisites: None.
Registration Information: None.

SOC 326 Social Stratification 3(3-0)
Summer.
Inquire into inequalities of wealth, power, and the consequence for individuals and society.
Prerequisite: SOC 101 or SOC 201.
Corequisites: None.
Registration Information: None.

SOC 334 Sociology of the Military 3(3-0)
As Needed.
This course will examine the institution of the military and the intersection of the military and society.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

SOC 335 (CRIM 335) Advanced Research Methods 3(3-0)
As Needed.
Advanced course in qualitative & quantitative social science research methods. Focus on critical examination of the logic underlying social inquiry, the ethics of social research, & developing practical skills.
Prerequisites: CRIM 205 or SOC 205.
Corequisites: None.
Registration Information: None.

SOC 352 (PSYC 352) Social Psychology 3(3-0)
Fall, Spring.
General and applied psychological principles of the individual's interaction with a group.
Prerequisite: PSYC 100.
Corequisites: None.
Registration Information: None.

SOC 357 (ANTH 357, CRIM 357) Immigration 3(3-0)
As Needed.
Examines migration processes, with a particular focus on immigration to the United States. Migration patterns are analyzed considering social, political, and historical context, including structural global patterns.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 361 (CRIM 361) Advanced Cannabis Studies 3(3-0)
Spring.
In-depth exploration of prominent cannabis studies topics. Students will complete projects featuring cannabis research, business, political action/social justice, and creative works.
Prerequisite: CRIM 261 or SOC 261.
Corequisites: None.
Registration Information: Students receiving Military Education Benefits cannot use their benefits for any programs or courses related to cannabis studies.

SOC 370 Popular Culture 3(3-0)
As Needed.
Critical examination of the social implications of contemporary popular culture & its influence in our everyday lives. Explores how popular culture reflects & shapes key institutions, social behavior, & individual identities.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

SOC 373 Film & Society 3(3-0)
As Needed.
Analysis of film as a major contemporary cultural form that reflects, influences & shapes social values, beliefs & behaviors. Examines representations of race, class, gender & various social issues using a sociological lens.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

SOC 374 (CRIM 374) Crime in Film 3(3-0)
Spring.
Employ theoretical perspectives to better understand motivations of Hollywood criminals and the peculiar aspects of a society with an insatiable appetite for crime as "entertainment".
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 376 Crime & Society in Science Fiction 3(3-0)
Summer.
This course focuses on sociological understandings of crime and other social phenomena. Through science fiction literature, movies, and TV, the class explores how current social realities are reflected in science fiction.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 378 Rock 'n' Roll and Rebellion 3(3-0)
Fall.
The course provides a social historical analysis of the development and impact of an important form of contemporary popular culture - rock 'n' roll music.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 388 Community Engagement 3(3-0)
As Needed.
Explores how one's lived experiences can connect to wider social forces to positively impact the public domain. Students acquire the tools needed to carry their education into the workforce and towards civic engagement.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

SOC 388L Community Engagement Lab 1(0-2)
As Needed.
Students will work closely with their professor to research, address, and advocate for more awareness of a social issue by developing a community or university project that most closely aligns with student interests.
Prerequisite: None.
Corequisite: None.
Registration Information: It's strongly recommended that this course be taken with SOC 388.

SOC 404 Poverty and Inequality in the U.S. 3(3-0)
Spring.
Critical examination of sources and consequences of inequality and poverty, with primary focus on the United States. Anti-poverty programs explored.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 405 (CRIM 405) Law & Society 3(3-0)
Spring.
The origins and functions of law; the social organization of legal institutions and decisions; the relationship of law to morality, justice and social change.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 408 Science, Technology, and The Future 3(3-0)
Spring.
Social and structural implications of science and technology as they affect society.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 418 (CRIM 418) Crime, Drugs, & Social Policy 3(3-0)
As Needed.
This course examines the ways in which crime and drug policy is formulated, articulated, implemented, and evaluated.
Prerequisite: CRIM 101 or CRIM 203 or SOC 101 or SOC 203.
Corequisite: None.
Registration Information: None.

SOC 426 (CRIM 426) Collective Violence and Rioting 3(3-0)
Summer.
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: CRIM 101 or SOC 101.
Corequisites: None.
Registration Information: None.

SOC 428 (HIST 428, WS 428) Women & Work 3(3-0)
As Needed.
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: None.
Corequisites: None.
Registration Information: Junior or senior standing. Permission of instructor.

SOC 432 Organization Theory 3(3-0)
As Needed.
Critical examination of theories of organizational structure, process, and change. Explores origins and functions of formal organizations in human society.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 435 The Interviewer's Craft 3(3-0)
As Needed.
Introduces the variety of qualitative methods used in the social sciences for conducting research studies, gathering data and interpreting and analyzing research findings with a focus on interviewing techniques.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SOC 450 Soc of Mental Health and Suicide 3(3-0)
As Needed.
Examines the social conditions that influence mental health and suicide in the United States and the psychosocial processes that link social experiences to psychological health.
Prerequisite: PSYC 352 or SOC 101 or SOC 352.
Corequisites: None.
Registration Information: None.

SOC 452 (PSYC 452) The Individual & Society 3(3-0)
As Needed.
How does our society shape the way we define ourselves and others? This class explores the relationship between the individual and society, and how that relationship affects the choices we make and the actions we take.
Prerequisites: PSYC 100 or PSYC 352 or SOC 101 or SOC 352.
Corequisites: None.
Registration Information: None.

SOC 490 Special Projects (1-3 V)
As Needed.
Allows one or more students to conceptualize, create, and complete a project relating to sociology, under supervision of faculty member(s).
Prerequisite: None.
Corequisites: None.
Registration Information: Sociology major. Junior standing. Permission of instructor. Repeatable (99).

SOC 491 Special Topics 1-3(1-3-0)
As Needed.
Special topics in sociology.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (18).

SOC 492 Research (1-3 V)
As Needed.
Directed study for students interested in gaining research experience in sociology.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (12).

SOC 494 Field Experience (1-12 V)
As Needed.
Practical on-the-job experience in an agency setting.
Prerequisite: None.
Corequisites: None.
Registration Information: Sociology major. Junior standing. Permission of instructor. Repeatable (12).

SOC 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisites: None.
Registration Information: Sociology major or minor. Permission of instructor. Repeatable (9).

SOC 498 Internship 3(0-9)
As Needed.
Provides students the opportunity to engage in an off-campus work experience related to their career interests. Students will learn how to apply the academic principles acquired through the classroom to a work situation.
Prerequisite: SOC 388 and SOC 388L.
Corequisite: None.
Registration Information: Students must be declared sociology or criminology major with community engagement core; or permission of the instructor.

Spanish (SPN)

SPN 100 Intro to Conversational Spanish 3(3-0)
As Needed.
Basis skills for understanding and speaking Spanish.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

SPN 101 Beginning Spanish I 3(3-0)
Fall, Spring, Even.
Development of skills in speaking, listening, reading, writing; and cultural understanding.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

SPN 102 Beginning Spanish II 3(3-0)
Fall, Spring, Even.
Continuation of the development of skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: SPN 101.
Corequisites: None.
Registration Information: Placement exam required for prerequisite equivalents.
(Gen Ed: H) (CC)

SPN 130 Intro to Spanish-Speaking Cultures 3(3-0)
As Needed.
Topics in the history, literatures, and art of selected Spanish-Speaking cultures, with an intro to basic Spanish. Taught in English and Spanish.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

SPN 201 Intermediate Spanish I (GT-AH4) 3(3-0)
Fall, Spring, Even.
Development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: SPN 102.
Corequisites: None.
Registration Information: Placement exam required for prerequisite equivalents.
(Gen Ed: H, GT-AH4) (CC)

SPN 202 Intermediate Spanish II (GT-AH4) 3(3-0)
Fall, Even.
Continued development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: SPN 102.
Corequisites: None.
Registration Information: Placement exam required for prerequisite equivalents.
(Gen Ed: H, GT-AH4) (CC)

SPN 203 Intermediate Proficiency Building (3 V)
Spring, Even.
Solidification of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding.
Prerequisite: SPN 102.
Corequisites: None.
Registration Information: Placement exam required for prerequisite equivalents.

SPN 205 Basic Spanish for Health Professions 3(3-0)
Summer.
Focus on improving linguistic and cultural proficiency through the study of basic Spanish for healthcare, and cultural approaches for the field.
Prerequisites: SPN 101 and SPN 102.
Corequisites: None.
Registration Information: Placement may substitute prerequisites.

SPN 287 Intensive Spanish Study Abroad (1-9 V)
As Needed.
Study of Spanish in an immersion setting abroad, preparing the student for fluency through the study of grammar, civilization and culture, at an approved institution.
Prerequisite: SPN 102.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (9).

SPN 294 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: SPN 201.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (7).

SPN 295 Independent Study (1-3 V)
As Needed.
Focus on increasing linguistic proficiency through an independent project or agreed upon plan of study that relates to the Spanish-speaking world.
Prerequisite: SPN 102.
Corequisites: None.
Registration Information: Permission of instructor.

SPN 301 Spanish Grammar in Context 3(3-0)
Fall, Spring, Even.
Practice of Spanish grammar in the context of writing, reading, speaking and listening.
Prerequisite: SPN 201 and SPN 202 and SPN 203.
Corequisites: None.
Registration Information: None.

SPN 303 Spanish Phonetics & Phonology (3 V)
Fall, Spring, Even.
Focus on improving linguistic proficiency through the study of the Spanish language sound system.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 309 Intro to Hispanic Linguistics 3(3-0)
As Needed.
Focus on improving linguistic proficiency through the study of areas of inquiry including history of Spanish, first and second language acquisition, bilingualism, language variation, etc.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 312 Conv & Comp: Mexico & Central Amer 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of Mexican and Central American cultures.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 313 Conv & Comp: South America 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of South American cultures.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 314 Conv & Comp: Caribbean 3(3-0)
As Needed.
Focus on improving linguistic proficiency with the context of Caribbean Hispanic cultures.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 315 Conv & Comp: Spain 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of Spanish cultures.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 316 Conv & Comp: U.S. Latinx 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of Hispanix/Latinx cultures in the United States.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 317 Conversation & Composition: Topics (3 V)
As Needed.
Focus on improving linguistic proficiency within the context of discussing topics pertinent to the Spanish-speaking world.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 318 Conversation & Composition: Spanish Language Films 3(3-0)
As Needed.
Focus on improving linguistic proficiency within the context of Spanish language films.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 331 Business: SPN Speaking World 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through the study and exploration of the Hispanic business world.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 332 Health/Wellbeing: SPN Speaking Wrld 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through the study topics about health and wellbeing in the Spanish-speaking world.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 341 Intro to Translation/Interpretation 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through the study and practice of translation and interpretation.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: None.

SPN 342 Intermediate Translation Practicum 1-3(0-1-3)
As Needed.
Focus on improving intermediate high to advanced low linguistic and cultural proficiency through practical experience in various aspects of translation work.
Prerequisites: SPN 441.
Corequisites: None.
Registration Information: Intermediate proficiency level in Spanish required. Repeatable (6).

SPN 370 Intro to Literature & Culture (3 V)
As Needed.
Focus on improving linguistic proficiency through the study of basic concepts necessary for analysis of literature, film, music, art, media, etc in the Spanish-Speaking World.
Prerequisite: SPN 301.
Corequisites: None.
Registration Information: Permission of instructor.

SPN 387 Intensive Spanish Study Abroad (1-12 V)
As Needed.
Study of Spanish in an immersion setting abroad preparing the student to become fluent in the language through the study of grammar, civilization and culture.
Prerequisite: SPN 201 and SPN 202 and SPN 203.
Corequisites: None.
Registration Information: Repeatable (12).

SPN 391 Special Topics 3(3-0)
As Needed.
Special Topics.
Prerequisite: SPN 202 or SPN 203 or SPN 301.
Corequisites: None.
Registration Information: Repeatable (9).

SPN 394 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: SPN 201 and SPN 202 and SPN 203.
Corequisites: None.
Registration Information: Repeatable (7).

SPN 395 Independent Study (1-3 V)
As Needed.
Focus on increasing linguistic proficiency through an independent project or agreed upon plan of study that relates to the Spanish-speaking world.
Prerequisite: SPN 201 and SPN 202 and SPN 203.
Corequisites: None.
Registration Information: None.

SPN 412 Cultural Studies: Mexico/Central Am 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of cultural products, values, and belief systems as they pertain to relationships of power in Mexico/Central America.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 413 Cultural Studies: South America 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of cultural products, values, and belief systems as they pertain to relationships of power in South America.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 414 Cultural Studies: Caribbean 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of cultural products, values, and belief systems as they pertain to relationships of power in the Spanish Caribbean.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 415 Cultural Studies: Spain 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of cultural products, values, and belief systems as they pertain to relationships of power in Spain.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 416 Cultural Studies: U.S. Latinx 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of cultural products, values, and belief systems as they pertain to relationships of power in U.S.A. Latinx culture.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 417 Topics in Cultural Studies 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of cultural products, values, and belief systems as they pertain to relationships of power throughout the Spanish-speaking world.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 430 Topics in Literature 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of selected works, themes, genres or periods in literature. Taught in Spanish.
Prerequisites: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 441 Advanced Translation 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through the advanced, focused study and practice of translation.
Prerequisites: SPN 370 or SPN 341.
Corequisites: None.
Registration Information: Permission of instructor.

SPN 442 Advanced Translation Practicum 1-3(0-1-3)
As Needed.
Focus on improving advanced to superior linguistic and cultural proficiency through practical experience in various aspects of translation work.
Prerequisites: SPN 441.
Corequisites: None.
Registration Information: Intermediate high proficiency level needed. Repeatable (6).

SPN 462 Representations of Migration 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through the study of how migration is represented in the Spanish-speaking world through art, music, literature, film, media, etc.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 463 Representations of Gender 3(3-0)
As Needed.
Focus on improving linguistic proficiency through the critical study of how gender is represented in art, music, literature, film, media, etc.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 464 Politics & Power 3(3-0)
As Needed.
Focus on improving linguistic proficiency through the critical study of politics and power in the Spanish-speaking world, and how it is represented in art, music, literature, film, media, etc.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 481 Cinema of Spain 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through the critical study of selected Spanish films and their historical context.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 482 Cinema of Latin America 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through the critical study of selected Latin American films and their historical context.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 491 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: Repeatable (99).

SPN 493 Senior Seminar 3(3-0)
As Needed.
In-depth analysis of specific topics, themes, authors, and works in the language literatures and cultures of the Spanish-speaking world.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: None.

SPN 494 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: Repeatable (99).

SPN 495 Independent Study (1-3 V)
As Needed.
Focus on increasing linguistic proficiency through an independent project or agreed upon plan of study that relates to the Spanish speaking world .
Prerequisite: SPN 370.
Corequisites: None.
Registration Information: Repeatable (99).

SPN 501 Spanish Grammar in Context 3(3-0)
As Needed.
Practice of Spanish Grammar in the context of writing, reading, speaking and listening.
Prerequisite: None.
Corequisites: None.
Registration Information: Graduate Standing.

SPN 517 Topics in Cultural Studies 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of cultural products, values, and belief systems as they pertain to relationships of power throughout the Spanish-speaking world.
Prerequisite: None.
Corequisites: None.
Registration Information: Graduate Standing.

SPN 534 Topics in Literature 3(3-0)
As Needed.
Focus on increasing linguistic proficiency through study of selected works, themes, genres or periods from the Spanish-speaking world.
Prerequisite: None.
Corequisites: None.
Registration Information: Graduate Standing.

SPN 591 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisites: None.
Registration Information: Graduate Standing. Repeatable (9).

SPN 595 Independent Study (1-3 V)
As Needed.
Focus on increasing linguistic proficiency through an independent project or agreed upon plan of study that relates to the Spanish-speaking world.
Prerequisite: None.
Corequisites: None.
Registration Information: Graduate Standing. Repeatable (9).

Transportation Engineering (TENG)

TENG 140 Railway Basics & Safety 3(3-0)
As Needed.
Introduction to railway materials, infrastructure, different aspects of operations, innovation policy, vehicle dynamics, power, rolling stock, maintenance, and structural, operational, socio-economic and environmental safety.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

TENG 405 Multimodal Transportation Systems 3(3-0)
As Needed.
Overview of materials, infrastructure, operations, safety and future aspects of ground, water and air transportation systems.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

TENG 415 Supply-Chain & Logistics Management 3(3-0)
As Needed.
Analysis, design, operation, and evaluation of supply chain and logistics systems including concepts, demand forecast, transformation of demand into supply, national and international policy and efficient transportation.
Prerequisites: MATH 101.
Corequisites: None.
Registration Information: None.

TENG 440 Railway Transportation 3(3-0)
As Needed.
Comprehensive study of railway geotechniques, infrastructure, road dynamics, power systems, operations, efficiency, safety, engineering analysis and design.
Prerequisites: PHYS 201.
Corequisites: None.
Registration Information: None.

University Studies (US)

US 101 Academic & Career Exploration 1(1-0)
Fall.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

US 151 Introduction to Academic Life 3(3-0)
Fall, Spring.
To provide an opportunity for students to learn and adopt methods to be successful in college. Critical thinking, writing and time management are emphasized.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

US 251 Student Leadership Development 2(2-0)
Spring.
Create an opportunity for students to define, learn, adopt, and integrate within themselves the "purpose of leadership".
Prerequisite: None.
Corequisites: None.
Registration Information: None.

US 255 Residence Hall Advising 1(1-0)
Spring.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

US 350 Orientation Leadership Training 3(3-0)
Spring.
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.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

US 355 Becoming an Effective Tutor 3(2-2)
As Needed.
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.
Prerequisites: None.
Corequisites: None.
Registration Information: None.

Wildlife & Natural Resources (WANR)

WANR 291 Special Topics (1 V)
As Needed.
Special Topics in Wildlife.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

WANR 302 Principles of Wildlife Management 3(2-2)
Spring.
Examine wildlife as a natural resource, with emphasis on principles of ecology, and management.
Prerequisite: BIOL 352.
Corequisite: None.
Registration Information: None.

WANR 303 Nat Resource Policy & Admin 3(3-0)
As Needed.
Principles and concepts of public land and resources policy, administrative decision making, and contemporary issues and problems.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 304 Human Dimensions in Nat Res Mgmt 3(3-0)
Fall, Odd.
Science of incorporating human-natural resource relationships with traditional biological sciences information in decision-making processes.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 401 Fisheries Science 2(2-0)
Spring, Even.
Principles and concepts of studying structure and dynamics of fish populations. Topics include estimating abundance, mortality, sustainable harvest levels, appropriate regulations.
Prerequisite: None.
Corequisite: WANR 401L.
Registration Information: None.

WANR 401L Fisheries Science Lab 1(0-2)
Spring, Even.
Principles and concepts of studying structure and dynamics of fish populations. Topics include estimating abundance, mortality, sustainable harvest levels, appropriate regulations.
Prerequisite: None.
Corequisite: WANR 401.
Registration Information: None.

WANR 402 Management of Endangered Species 3(3-0)
As Needed.
Problems and solutions of species endangerment. Political and biological aspects to endangered species. Proactive and reactive maintenance and restoration.
Prerequisite: BIOL 352.
Corequisite: None.
Registration Information: None.

WANR 410 Aquaculture 3(2-2)
Spring, Odd.
Commonly used culture systems, fundamentals of fish and shellfish husbandry, appreciation of aquaculture's roles in natural resource management, the human food supply, and the global economy.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 421 Wildlife Conservation 3(2-2)
Spring, Odd.
Knowledge, theories, and research related to the total environment in which we practice conservation.
Prerequisite: BIOL 352.
Corequisite: None.
Registration Information: None.

WANR 430 Wildlife & Fisheries Techniques 4(0-8)
As Needed.
Covers study design, radio telemetry, passive monitoring techniques, animal capture and handling, population estimation, and quantifying vegetation and habitat usage.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 475 Science Communication 3(3-0)
Fall, Even.
Overview of science communication for STEM students, and employs a variety of practice-based activities to strengthen communication skills.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 485 Wildlife Research Discussion 1(1-0)
Spring.
Discussion of a broad range of topics and current research in Wildlife Biology.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 487 R Code Introduction 1(0-2)
Fall.
Practical issues in R code statistical computing, including programming in R, reading data into R, accessing R packages, writing R functions, debugging, and organizing and commenting R code.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 491 Special Topics (1-4 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisite: None.
Registration Information: Repeatable (99).

WANR 501 Fisheries Science 2(2-0)
Spring, Even.
Introduction to the structure and functioning of freshwater and marine aquatic ecosystems, including the basic biology and field techniques required to successfully manage fish populations.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 501L Fisheries Science Lab 1(0-2)
Spring, Even.
Hands on opportunities to do fisheries work and techniques.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 502 Management of Endangered Species 3(3-0)
As Needed.
Problems and solutions of species endangerment. Political and biological aspects of endangered species. Proactive and reactive maintenance and restoration.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 510 Aquaculture 3(2-2)
Spring, Odd.
Commonly used culture systems, fundamentals of fish and shellfish husbandry, appreciation of aquaculture's roles in natural resource management, the human food supply, and the global economy.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 521 Wildlife Conservation 3(2-2)
Spring, Odd.
Knowledge, theories, and research related to the total environment in which we practice conservation.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 530 Wildlife & Fisheries Techniques 4(0-8)
As Needed.
Covers study design, radio telemetry, passive monitoring techniques, animal capture and handling, population estimation, and quantifying vegetation and habitat usage.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 575 Science Communication 3(3-0)
Fall, Even.
Overview of science communication for STEM students, and employs a variety of practice-based activities to strengthen communication skills.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 585 Wildlife Research Discussion 1(1-0)
Spring.
Examination of professional wildlife research from presentations, including analysis of their theories, strengths, and weaknesses.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WANR 587 R Code Introduction 1(0-2)
Fall.
Practical issues in R code statistical computing, including programming in R, reading data into R, accessing R packages, writing R functions, debugging, and organizing and commenting R code.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

Women's Studies (WS)

WS 100 Introduction to Women's Studies 3(3-0)
Fall, Spring, Summer.
An interdisciplinary course examining women's lives and roles through socio-economic, political, historical and biological perspectives. Introduces feminist theories and gender as a structure and process.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: SS) (CC)

WS 105 (ANTH 105, DS 105, PSYC 105, SOC 105) Understanding Human Diversity 3(3-0)
As Needed.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 211 (MAE 211) Women & Media 3(3-0)
Fall.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 212 (PSYC 212) Psychology of Diversity 3(3-0)
Fall.
To raise awareness of social inequities, promote cultural competency & appreciation of differences.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 217 (MAE 217, PSYC 217) Women & Society 3(3-0)
As Needed.
Statistical overview of the current status of women, followed by examination of theories concerning equality of the sexes.
Prerequisite: PSYC 100.
Corequisite: None.
Registration Information: None.

WS 230 (NSG 230) Women, Health, & Society 3(3-0)
As Needed.
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.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 241 (ENG 241) Women in Literature 3(3-0)
As Needed.
Intensive study of literature written by women, in historical, cultural, and critical contexts.
Prerequisite: ENG 102 or ENG 115 or ENG 117.
Corequisites: None.
Registration Information: None.

WS 291 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

WS 301 Theories of Intersectionality 3(3-0)
Spring.
Examination of gender, sexuality, race, class, and other variables connecting theory to activism. Exploration of how multiple identities intersect to create a whole.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 305 (CRIM 305, SOC 305) Women & Crime 3(3-0)
As Needed.
A critical examination of the historical and contemporary intersecting issues of sex, gender, and crime, focusing on girls' and women's experiences as victims, offenders, and workers in the criminal justice system.
Prerequisite: ANTH 100 or CRIM 101 or SOC 101 or WS 100.
Corequisites: None.
Registration Information: None.

WS 306 (CS 306) La Chicana 3(3-0)
Fall, Spring.
A social cultural and historical overview of the Chicana experience and contributions.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 308 Global Feminisms 3(3-0)
As Needed.
Examination of global dimensions of women's organizing and policymaking, drawing on both historical and contemporary examples. Exploration of global debates regarding contemporary feminist theory, practice, and activism.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 311 Gender & Film 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: None.

WS 325 (SOC 325) Gender And Society 3(3-0)
Summer.
Analysis of how gender as a social construct influences institutions, interaction & lived experience in a diverse society. The intersection of race, ethnicity, class & sexualities is viewed through the lens of gender & culture.
Prerequisite: SOC 101 or WS 100.
Corequisites: None.
Registration Information: None.

WS 335 (CID 335) Gender & Communication 3(3-0)
As Needed.
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: None.
Corequisite: None.
Registration Information: None.

WS 341 (CS 341) Chicana Writers 3(3-0)
As Needed.
Survey of Chicana writers from the early 1900s to the present. Along with the literature, aspects of history, sociology and politics will be incorporated.
Prerequisite: None.
Corequisite: None.
Registration Information: None.

WS 401 (CS 401) Third World Feminisms 3(3-0)
As Needed.
This course focuses on Third World women's challenging views of global feminism and feminist representations of other women.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 407 (CRIM 407) Family Violence 3(3-0)
As Needed.
The extent, seriousness, and impact of major forms of family violence, including child maltreatment, dating and partner violence, stalking, and mistreatment of elders. Gender, race and social class implications are examined.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 428 (HIST 428, SOC 428) Women & Work 3(3-0)
As Needed.
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: None.
Corequisites: None.
Registration Information: Junior or senior standing. Permission of instructor.

WS 455 (CRIM 455) Hate Crimes 3(3-0)
As Needed.
Examines assumptions about race, ethnicity, gender, sexuality, religion, nationality & other factors that are used to justify the bias behind hate crimes; examines social/legal definitions, causal factors & consequences.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WS 485 Capstone 3(3-0)
As Needed.
Students develop and execute a research project related to gender, sexuality, and intersectionality.
Prerequisite: None.
Corequisites: None.
Registration Information: Senior standing. Permission of the instructor.

WS 490 Special Projects (1-3 V)
As Needed.
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 the WS program coordinator.
Prerequisite: None.
Corequisites: None.
Registration Information: Women's Studies minor. Junior standing. Permission of instructor. Repeatable (6).

WS 491 Special Topics (1-3 V)
As Needed.
Special topics in Women's Studies.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of the instructor. Repeatable (99).

WS 492 Research (1-3 V)
As Needed.
Research project selected by student and supervised by a faculty member.
Prerequisite: None.
Corequisites: None.
Registration Information: Women's Studies minor. Junior standing. Permission of instructor. Repeatable (6).

WS 494 Field Experience (2-6 V)
As Needed.
Application of the WS disciplinary framework to an off-campus volunteer work experience, under the supervision of a faculty member approved by WS.
Prerequisite: None.
Corequisites: None.
Registration Information: Women's Studies minor. Junior standing. Permission of instructor. Repeatable (6).

WS 495 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (3).

WS 498 Internship (2-6 V)
As Needed.
Application of the WS disciplinary framework to a work experience, under the direction of the selected site and a faulty member approved by WS.
Prerequisite: None.
Corequisites: None.
Registration Information: Women's Studies minor. Junior standing. Permission of instructor. Repeatable (6).

World Language (WL)

WL 100 Intro to Comparative Linguistics 3(3-0)
As Needed.
Basic concepts in linguistics; comparison of languages.
Prerequisite: None.
Corequisites: None.
Registration Information: None.
(Gen Ed: H) (CC)

WL 101 Intro to a Critical Wrld Language I 3(3-0)
As Needed.
Study of a world language not offered regularly. Different languages are offered when enrollment permits.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (6).
(Gen Ed: H) (CC)

WL 102 Intro to a Critical Wrl Language II 3(3-0)
As Needed.
Introduction to a Critical World Language II.
Prerequisite: WL 101.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (6).
(Gen Ed: H) (CC)

WL 110 World Language for Travel 1(1-0)
As Needed.
Fundamental vocabulary for basic tourist communication.
Prerequisite: None.
Corequisites: None.
Registration Information: None.

WL 291 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

WL 294 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

WL 394 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

WL 494 Field Experience (1-7 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: None.
Corequisites: None.
Registration Information: Permission of instructor. Repeatable (99).

WL 495 Independent Study (1-3 V)
As Needed.
Focus on increasing linguistic proficiency through an independent project or agreed upon plan of study that relates to the target language.
Prerequisite: None.
Corequisites: None.
Registration Information: Repeatable (99).

WL 591 Special Topics (1-3 V)
As Needed.
Special Topics.
Prerequisite: None.
Corequisites: None.
Registration Information: Graduate standing. Repeatable (99).

WL 594 Field Experience (1-9 V)
As Needed.
Continued improvement of language proficiency through experiential learning. Students participate in an immersive target-language environment at home or abroad.
Prerequisite: None.
Corequisites: None.
Registration Information: Graduate standing. Repeatable (9).

WL 595 Independent Study (1-3 V)
As Needed.
Independent Study.
Prerequisite: None.
Corequisites: None.
Registration Information: Graduate standing. Repeatable (9).

INDEX

#

1098-T ... 33

A

Academic & Degree Programs ... 95
Academic Conduct ... 45
Academic Fresh Start ... 46
Academic Policies ... 45
Academic Standing ... 46
Academic Year ... 47
Accounting (ACCT) ... 577
Accounting, Bachelor of Science in Business Administration ... 506
Accounting, Minor ... 508
Admission Requirements ... 14
Advanced Spanish for the Health Professions, Certificate ... 261
American Sign Language (ASL) ... 578
Anthropology (ANTH) ... 579
Anthropology, Minor ... 372
Art & Creative Media, Bachelor of Arts ... 238
Art & Creative Media Department ... 233
Art & Creative Media, Minor ... 239
Art & Creative Media: Art History Concentration, Bachelor of Arts ... 240
Art & Creative Media: Creative Media Concentration, Bachelor of Fine Arts ... 241
Art & Creative Media: K-12 Teacher Preparation Concentration, Bachelor of Arts ... 242
Art & Creative Media: Studio Arts Concentration, Bachelor of Fine Arts . 243
Art (ART) ... 582
Art History (ARH) ... 586
Art, Research, & Creativity (ARC) ... 580
Assessment of Student Learning ... 47
Associate of Arts ... 82
Associate of General Studies ... 82
Associated Student Government ... 34
Athletic Training 3+2 Program, Bachelor of Science/Master of Science 207
Athletic Training (AT) ... 587
Athletic Training, Master of Science ... 209
Athletics ... 83
Attendance ... 47
Automotive Industry Management (AIM) ... 589
Awarding of Degrees ... 48

B

Basic Spanish for the Health Professions, Certificate ... 262
Billing ... 32
Biochemistry 3+2 Plan, Joint Bachelor of Science/Master of Science .. 422
Biochemistry, Master of Science ... 424
Biology 3+2 Program, Bachelor of Science/Master of Science ... 401
Biology (BIOL) ... 591
Biology Department ... 387
Biology, Master of Science ... 403
Biology, Minor ... 404
Biology/Chemistry Double Major, Bachelor of Science ... 405
Biology: 7-12 Teacher Preparation Concentration, Bachelor of Science . 406
Biology: Basic Biology Concentration, Bachelor of Science ... 407
Biology: Biomedical Sciences Concentration, Bachelor of Science ... 408
Biology: Cellular & Molecular Biosciences Concentration, Bachelor of Science ... 409
Biology: Environmental Biosciences Concentration, Bachelor of Science ... 410
Business Administration 3+2 Program, Integrated Bachelor of Science/Master of Business Administration ... 508
Business Administration 3+2 Program, Integrated Computer Information Systems, Bachelor of Science/Master of Business Administration ... 509
Business Administration 3+2 Program, Integrated Construction Management, Bachelor of Science/Master of Business Administration 510
Business Administration 3+2 Program, Non-Integrated BS, BA/MBA ... 512
Business Administration 3+2 Program, Non-Integrated BS,BA/MBA in Business Administration: Public Management Concentration ... 512
Business Administration (BSAD) ... 602
Business Administration, Master of Business Administration ... 513
Business Administration, Minor ... 514
Business Administration: Cybersecurity Concentration, Master of Business Administration ... 515
Business Administration: Healthcare Administration Concentration, Master of Business Administration ... 515
Business Administration: Public Management Concentration, Masters of Business Administration ... 516
Business Management, Bachelor of Science in Business Administration ... 516
Business Management: Agribusiness Concentration, Bachelor of Science in Business Administration ... 518
Business Management: Cannabis Industry Management Concentration, Bachelor of Science in Business Administration ... 519
Business Management: Information Technology Concentration, Bachelor of Science in Business Administration ... 521
Business Management: Organizational Risk & Security Management Concentration, Bachelor of Science in Business Administration ... 522
Business Management: Sports Industry Management Concentration, Bachelor of Science in Business Administration ... 524

C

CAMP 34
Campus Safety 11
Cannabis Biology & Chemistry 3+2 Plan, Joint Bachelor of Science/Master of Science 426
Cannabis Biology & Chemistry (CBC) 604
Cannabis Biology & Chemistry, Certificate 427
Cannabis Biology & Chemistry, Master of Science 427
Cannabis Biology & Chemistry, Post-Baccalaureate Certificate 429
Cannabis Biology & Chemistry: Analytical Concentration, Bachelor of Science 430
Cannabis Biology & Chemistry: Hemp Agriculture Concentration, Bachelor of Science 430
Cannabis Biology & Chemistry: Natural Products Concentration, Bachelor of Science 431
Cannabis Studies, Minor 244
Career & Professional Enhancement 91
Career Center 35
Center for Honors & Leadership 84
Center for International Programs & Inclusive Excellence 35
Center for Teaching & Learning 84
Center for Teaching & Learning (CTL) 605
Character Education & Social Emotional Learning, Post-Baccalaureate Certificate 128
Chemistry 3+2 Plan, Joint Bachelor of Science/Master of Science 432
Chemistry (CHEM) 606
Chemistry Department 413
Chemistry, Master of Science 434
Chemistry, Minor 435
Chemistry/Biology Double Major, Bachelor of Science 436
Chemistry: 7-12 Teacher Preparation Concentration, Bachelor of Science 437
Chemistry: ACS Certified Concentration, Bachelor of Science 438
Chemistry: Basic Chemistry Concentration, Bachelor of Science 439
Chemistry: Biochemistry Concentration, Bachelor of Science 440
Chemistry: Environmental Chemistry Concentration, Bachelor of Science 442
Chicano Studies (CS) 612
Chicano/a Studies, Minor 245
Civil Engineering, Bachelor of Science in Civil Engineering 478
Civil Engineering (CE) 613
Civil Engineering, Minor 448
Civil Engineering Technology, Bachelor of Science in Civil Engineering Technology 447
Civil Engineering Technology (CET) 615
Class Schedule Change 49
Classification of Students 49
Coaching, Minor 210
College of Health & Education 110
College of Humanities, Arts, & Social Sciences 232
College of Science, Technology, Engineering, & Mathematics 386
Colorado Studies, Certificate 282
Commencement Ceremonies 36
Communication & Information Design (CID) 617
Communities to Build Active Stem Engagement 84
Communities to Build Active STEM Engagement (CBSE) 618
Composition/Music Theory, Minor 334
Computational Mathematics, Minor 459
Computer Information Systems, Bachelor of Science 525
Computer Information Systems (CIS) 618
Computer Information Systems, Minor 527
Computer Information Systems: Cyber Security Concentration, Bachelor of Science 527
Computer Information Systems: Data Analytics Concentration, Bachelor of Science 528
Computer Information Systems: Software Development Concentration, Bachelor of Science 529
Construction Management, Bachelor of Science 448
Construction Management (CM) 621
Construction Management, Minor 450
Construction Procurement, Certificate 450
Construction Project Manager, Certificate 451
Construction Safety, Law, & Management, Certificate 451
Continuing Education (CNED) 622
Continuous Registration (CR) 623
Course Description Information 574
Course Repeats 50
Course Substitutions 50
Course Withdrawals 50
Creative Industry Essentials, Certificate 246
Creative Wellness (CW) 623
Creative Wellness, Minor 349
Creative Writing, Minor 262
Criminology, Bachelor of Arts 373
Criminology, Bachelor of Science 374
Criminology (CRIM) 623
Criminology/Sociology Double Major, Bachelor of Arts 375
Criminology/Sociology Double Major, Bachelor of Science 376

Criminology: Community Engagement Concentration, Bachelor of Science 378
CSU Pueblo Bookstore 84
CSU Pueblo Food Services 85
CSU Pueblo Online 91
Culturally & Linguistically Diverse Education (CLDE) 626
Cyber Security, Minor 530

D

Data Analytics, Certficate 459
Data Analytics, Minor 531
Disability Resources 36
Diversity Studies, Certificate 246
Diversity Studies (DS) 627

E

Early Childhood Education, Bachelor of Science 128
Early Childhood Education (ECE) 628
Early Childhood Education, Post-Baccalaureate Certificate 129
Early Childhood Education: K-3 Teacher Preparation Concentration, Bachelor of Science 129
Economics, Bachelor of Science in Business Administration 531
Economics (ECON) 630
Economics, Minor 533
Economics: Finance Concentration, Bachelor of Science in Business Administration 533
Education (ED) 632
Education: Art Education Concentration, Master of Education 131
Education: Curriculum & Instruction Concentration, Master of Education 134
Education: Early Childhood Education Concentration, Master of Education 137
Education: Early Learning Concentration, Master of Education 140
Education: Educational Leadership Concentration, Master of Education 143
Education: English Concentration, Master of Education 146
Education: Gifted Education Concentration, Master of Education 149
Education: Health & Physical Education Concentration, Master of Education 151
Education: Instructional Technology Concentration, Master of Education 154
Education: Linguistically Diverse Concentration, Master of Education . 157
Education: Music Education Concentration, Master of Education 160
Education: Principal Licensure, Post-Baccalaureate Certificate 163
Education: Reading, Language, & Literacy Concentration, Master of Education 164
Education: Space Studies for Educators Concentration, Master of Education 166
Education: Special Education Concentration, Master of Education 169
Education: World Language Concentration, Master of Education 172
Educational Leadership, Doctor of Education 175
Elementary Education: K-6 Teacher Preparation Concentration, Bachelor of Science 176
Engineering 3+2 Program, Bachelor of Science/Master of Science 479
Engineering, Bachelor of Science in Engineering: Mechatronics Specialization 480
Engineering (EN) 641
Engineering, Minor 481
Engineering Technology & Construction Management Department 443
English & World Languages Department 247
English as a Second Language (ESL) 652
English, Bachelor of Arts 263
English (ENG) 648
English, Minor 264
English: 7-12 Teacher Preparation Concentration, Bachelor of Arts 265
English: Creative Writing Concentration, Bachelor of Arts 266
Equal Opportunity/Affirmative Action 10
Equivalency Charts 51
Escrow (ESCR) 653
Estimating & Planning Construction Costs, Certificate 450
Exception to Domicile Requirements 22
Exercise Science & Health Promotion (EPER) 653
Exercise Science, Minor 210
Exercise Science, Physical Education, & Recreation: General Exercise Science Concentration, Bachelor of Science 210
Exercise Science, Physical Education, & Recreation: K-12 Physical Education Teacher Preparation Concentration, Bachelor of Science ... 212
Exercise Science, Physical Education, & Recreation: K-12 Teacher Preparation Concentration 3+2 Plan, Integrated Bachelor of Science/ Master of Education: Health & Physical Education Concentration 214
Exercise Science, Physical Education, & Recreation: Recreation Concentration, Bachelor of Science 217
Exercise Science, Physical Education, & Recreation: Strength & Conditioning Concentration, Bachelor of Science 218
Experiential Education 58
Extended Studies 91
Extended Studies (EXST) 662
External Degree Program 91

F

FERPA 59
Finance (FIN) 662
Finance, Minor 534
Financial Aid Programs 28

First Year Students 15
First-Generation Programs 36
Fitness & Recreational Sports Management, Minor 219
Foundations of Business, Certificate 534
Freedom of Expression 62
French (FRN) 663

G

Gaming & Immersive Media, Bachelor of Fine Arts 273
General Education 62
Geography, Certificate 282
Geography (GEOG) 664
Geology (GEOL) 665
German (GER) 665
Governance & Accreditation 10
Grades & Grading System 65
Graduate Certificate in Railroad Engineering, Post-Baccalaureate Certificate 481
Graduate Returning Students 17
Graduate School 75
Graduate School Acceptance of Transfer Credits 77
Graduate School Admission Policies 77
Graduate School Admission Procedures 78
Graduate School Appeals 78
Graduate School Credit for Prior Learning 78
Graduate School Grading System 79
Graduate School Program Requirements 79
Graduate School Registration 80
Graduate School Time Limit of Credit 81
Graduate Students 17
Greek Life 38

H

Health & Fitness Certification for the Department of Corrections 219
Health Coaching, Minor 220
Health Education & Promotion (HEP) Program 38
Health Science & Administration, Bachelor of Applied Science 220
Health Science (HS) 666
Health Sciences General Concentration 3+2 Plan, Integrated Bachelor of Science/Master of Business Administration: Healthcare Administration Concentration 534
Health Sciences: General Health Science Concentration, Bachelor of Science 221
Health Sciences: Health Coaching Concentration, Bachelor of Science 223
Health Sciences: Pre-Accelerated Nursing Concentration, Bachelor of Science 224
Health Sciences: Pre-Athletic Training Concentration, Bachelor of Science 225
Health Sciences: Pre-Nursing Concentration 226
Health Sciences: Public Health Concentration, Bachelor of Science 228
High School Programs 91
History, Bachelor of Arts 282
History, Bachelor of Science 283
History (HIST) 668
History, Minor 284
History, Political Science, Philosophy, & Geography Department 274
History: 7-12 Teacher Preparation Concentration, Bachelor of Science . 285
Honors (HONR) 670
House Numbered Courses 575
Humanities & Social Sciences, Bachelor of Arts 293
Humanities & Social Sciences (HSS) 671
Humanities & Social Sciences, Minor 293

I

Immunization Requirement 66
Independent Study Program 92
Industrial & Systems Engineering, Master of Science 482
Industrial Engineering, Bachelor of Science in Industrial Engineering .. 483
Industrial Engineering, Minor 484
Institute of Cannabis Research (ICR) 671
Interdisciplinary Studies, Bachelor of Science 92
International Students 17
Italian (ITL) 671

J

Jake Jabs Certificate in Professional Entrepreneurship 536
Jazz Studies, Minor 334

K

K-12 Art, Post-Baccalaureate Certificate 180
K-12 Culturally & Linguistically Diverse Education, Post-Baccalaureate Certificate 181
K-12 Instructional Technology, Post-Baccalaureate Certificate 181
K-12 Music, Post-Baccalaureate Certificate 181
K-12 Physical Education, Post-Baccalaureate Certificate 182
K-12 Special Education Generalist, Post-Baccalaureate Certificate 182
K-12 World Languages - Spanish, Post-Baccalaureate Certificate 182
K-6 Elementary Education, Post-Baccalaureate Certificate 183

L

Lean Green Belt, Certificate 485
Legal Studies, Minor 286

Library Archival Studies (LAS) 673

M

Major Events 38
Management (MGMT) 673
Marketing, Bachelor of Science in Business Administration 536
Marketing, Minor 537
Marketing (MKTG) 676
Math Learning Center 85
Math/Physics Double Major, Bachelor of Science 459
Mathematics & Physics Department 452
Mathematics, Bachelor of Arts 460
Mathematics, Bachelor of Science 461
Mathematics (MATH) 677
Mathematics, Minor 462
Mathematics: 7-12 Teacher Preparation Concentration, Bachelor of Arts 462
Mathematics: 7-12 Teacher Preparation Concentration, Bachelor of Science 463
Mechatronics Engineering, Master of Science 485
Media & Entertainment Department 294
Media & Entertainment (MAE) 681
Media & Entertainment, Minor 300
Media & Entertainment: Media & Entertainment Production Concentration, Bachelor of Science 301
Media & Entertainment: Media, Entertainment, & Arts Management Concentration, Bachelor of Science 303
Media & Entertainment: Multimedia Journalism & Storytelling Concentration, Bachelor of Science 306
Media & Entertainment: Sports & ESports Media Concentration, Bachelor of Science 308
Media & Entertainment: Strategic Communication Concentration, Bachelor of Science 310
Microcredentials 85
Middle School (6-8) Mathematics, Post-Baccalaureate Certificate 183
Middle School Mathematics: 6-8 Teacher Preparation Concentration, Bachelor of Science 184
Military Science & Leadership (MSL) 686
Military Science, Minor 312
Museum Studies, Minor 314
Music, Bachelor of Arts 334
Music Department 314
Music, Minor 337
Music (MUS) 687
Music, Sound, & Audio Production, Minor 344
Music: K-12 Teacher Preparation Concentration, Bachelor of Arts 337
Music: Music Performance Concentration, Bachelor of Arts 340

N

National Student Exchange 19
Non Profit Administration 344
Non Profit Administration, Minor 344
Non-Degree Students 19
Non-Profit Administration (NPA) 706
Notes About This Issue 8
NSA-Designated Institution Certificate in Cyber Security Defense 537
Numbering of Courses 575
Nurse Educator, Post Masters Certification 549
Nurse Educator, Post-Baccalaureate Certificate 550
Nursing, Bachelor of Science in Nursing 550
Nursing (NSG) 706
Nursing: Adult/Gerontology Acute Care Nurse Practitioner Concentration, Doctor of Nursing Practice 555
Nursing: Adult/Gerontology Acute Care Nurse Practitioner Concentration, Master of Science 556
Nursing: Adult/Gerontology Acute Care Nurse Practitioner, Post Masters Certification 558
Nursing: Adult/Gerontology Acute Care/Family Nurse Practitioner Concentration, Doctor of Nursing Practice 559
Nursing: Adult/Gerontology Acute Care/Family Nurse Practitioner Concentration, Master of Science 561
Nursing: Adult/Gerontology Acute Care/Family Nurse Practitioner, Post Masters Certification 562
Nursing: Nurse Educator Concentration, Joint Bachelor of Science/Master of Science 563
Nursing: Nurse Educator Concentration, Master of Science 565
Nursing: Nurse Manager & Leader Concentration, Master of Science .. 566
Nursing: Population Health Concentration, Doctor of Nursing Practice 567
Nursing: Psychiatric-Mental Health Nurse Practitioner Concentration, Doctor of Nursing Practice 568
Nursing: Psychiatric-Mental Health Nurse Practitioner Concentration, Master of Science 570
Nursing: Psychiatric-Mental Health Nurse Practitioner, Post Masters Certification 571
Nutritional Psychology, Certificate 350

O

Occhiato Student Center 86
Office of Financial Management 32
Organ Performance Studies, Minor 343
Organizational Leadership, Bachelor of Applied Science 93
Orientation & University Events 39
Other Tuition Classification Categories 23
Outdoor Recreation, Minor 229

P

Pack CARES ... 39
Pack Center ... 86
Pack Pantry ... 39
Parent & Family Programs/Orientation ... 39
Payment Due Dates ... 33
Philosophy & Religious Studies, Minor ... 286
Philosophy (PHIL) ... 715
Physics, Bachelor of Science ... 464
Physics, Minor ... 465
Physics/Physical Science (PHYS) ... 716
Physics: 7-12 Physical Science Teacher Preparation Concentration, Bachelor of Science ... 465
Physics: 7-12 Teacher Preparation Concentration, Bachelor of Science 467
Piano Pedagogy, Minor ... 343
Political Science, Bachelor of Arts ... 287
Political Science, Bachelor of Science ... 288
Political Science, Minor ... 289
Political Science (POLS) ... 719
Political Science: 7-12 Teacher Preparation Concentration, Bachelor of Arts ... 290
Political Science: 7-12 Teacher Preparation Concentration, Bachelor of Science ... 291
Pre-Engineering Program ... 486
President's Leadership Program, Minor ... 86
President's Leadership Program (PLP) ... 722
Prior Learning ... 67
Program Requirements ... 68
Psychology, Bachelor of Arts ... 350
Psychology, Bachelor of Science ... 351
Psychology Department ... 345
Psychology, Minor ... 353
Psychology (PSYC) ... 723
Public Health, Minor ... 230

R

Reading, Minor ... 185
Reading (RDG) ... 727
Recreation Leadership, Certificate ... 230
Recreation, Minor ... 230
Registration ... 71
Requisites ... 576
Residence Life & Housing ... 39
Residency ... 21
Returning Students ... 16
Rocky Mountain Public Media (RMPM) ... 88

S

School of Education ... 112
School of Engineering ... 468
School of Health Sciences & Human Movement ... 191
School Of Nursing ... 539
Science (SCI) ... 728
Second Bachelors (Degree Plus) Students ... 16
Secondary & K-12 Education, Minor ... 185
Secondary English, Post-Baccalaureate Certificate ... 187
Secondary Mathematics, Post-Baccalaureate Certificate ... 187
Secondary Science - Biology, Post-Baccalaureate Certificate ... 188
Secondary Science - Chemistry, Post-Baccalaureate Certificate ... 188
Secondary Science - Physical Science, Post-Baccalaureate Certificate 189
Secondary Science - Physics, Post-Baccalaureate Certificate ... 190
Secondary Social Studies - History, Post-Baccalaureate Certificate 190
Secondary Social Studies - Political Science, Post-Baccalaureate Certificate ... 191
Six Sigma Green Belt, Certificate ... 486
Social Science (SCSC) ... 728
Social Work, Bachelor of Social Work ... 358
Social Work Department ... 353
Social Work, Masters of Social Work ... 360
Social Work (SW) ... 729
Sociology, Bachelor of Arts ... 379
Sociology, Bachelor of Science ... 380
Sociology, Criminology, & Anthropology Department ... 361
Sociology, Minor ... 381
Sociology (SOC) ... 733
Sociology: Community Engagement Concentration, Bachelor of Arts .. 382
Sociology: Community Engagement Concentration, Bachelor of Science ... 383
Spanish, Minor ... 267
Spanish (SPN) ... 737
Special Academic Programs & Services ... 82
Spiritual Life ... 41
Student Affairs ... 34
Student Affairs Assessment ... 41
Student & Exchange Visitor Program ... 88
Student Bill of Rights ... 72
Student Conduct & Community Standards ... 41
Student Counseling Center ... 42

Student Financial Services 26
Student Financial Services Policies 26
Student Health Services 42
Student Involvement & Organizations 42
Student Recreation Services 43
Supervisory Management, Minor 538
Surveying & Modeling, Certificate 451
Sustainability, Certificate 487
Sustainability, Minor 487

T

Teacher Education Program 94
Technology & Computing Instruction, Post-Baccalaureate Certificate .. 538
Terms of this Catalog Issue 9
The Hasan School of Business 489
The University 9
Time Limit of Credit 72
Tourism, Minor 230
Transcript of Credit 73
Transfer 73
Transfer Students 15
Transportation Engineering (TENG) 741

U

Unique Courses 576
University Honors Minor Program 89
University Leadership 12
University Library 90
University Studies 90
University Studies (US) 741

V

Veteran Studies, Minor 385
Vision, Mission, Values 10

W

Wildlife & Natural Resources (WANR) 741
Wildlife & Natural Resources: Aquatic Concentration, Bachelor of Science 411
Wildlife & Natural Resources: Terrestrial Concentration, Bachelor of Science 412
Women's Studies, Minor 384
Women's Studies (WS) 743
World Language (WL) 745
World Languages-Spanish, Bachelor of Arts 268
World Languages-Spanish: K-12 Teacher Preparation Concentration, Bachelor of Arts 269
World Languages-Spanish: Media & Entertainment Concentration, Bachelor of Arts 271
World Languages-Spanish: Translation Studies Concentration, Bachelor of Arts 272