

COMMUNITY COLLEGE



PIKES PEAK
COMMUNITY
COLLEGE

2021-2022 COURSE CATALOG



Photo by PPCC student Sondra Glovan

PIKES PEAK COMMUNITY COLLEGE

Thank you for your interest in Pikes Peak Community College.

From start to finish this catalog will be your guidebook. It contains everything you need to know about PPCC.

If you would like to know more about the College or would like a tour of any of our campuses, just give our Student Services Center a call at (719) 502-2000 or toll free at 866-411-PPCC.

Main Locations

Centennial Campus

5675 South Academy Boulevard
Colorado Springs, CO 80906

Downtown Studio Campus

100 West Pikes Peak Avenue
Colorado Springs, CO 80903

Rampart Range Campus

2070 Interquest Pkwy
Colorado Springs, CO 80921

Additional Locations

Aspen Valley Ranch

1150 South West Road
Woodland Park, CO 80863

Center for Healthcare Education and Simulation Campus

1850 Cypress Semi Drive
Colorado Springs, CO 80921

Technical Education Campus (TEC)

855 Aeroplaza Drive
Colorado Springs, CO 80916

UCHealth Community Education Center

2050 KidsKare Point
Colorado Springs, CO 80910

Additional Locations for Concurrent Enrollment only

Colorado Springs Early College
4405 N. Chestnut Street, Suite D
Colorado Springs, CO 80907

Harrison High School
2755 Janitell Road
Colorado Springs, CO 80906

Early College High School
2115 Afton Way
Colorado Springs, CO 80909

Sierra High School
2250 Jet Wing Drive
Colorado Springs, CO 80916

Military Sites

Fort Carson Education Center

Building 1117, Room 117
1175 Long Street
Fort Carson, CO 80913
719-502-4200

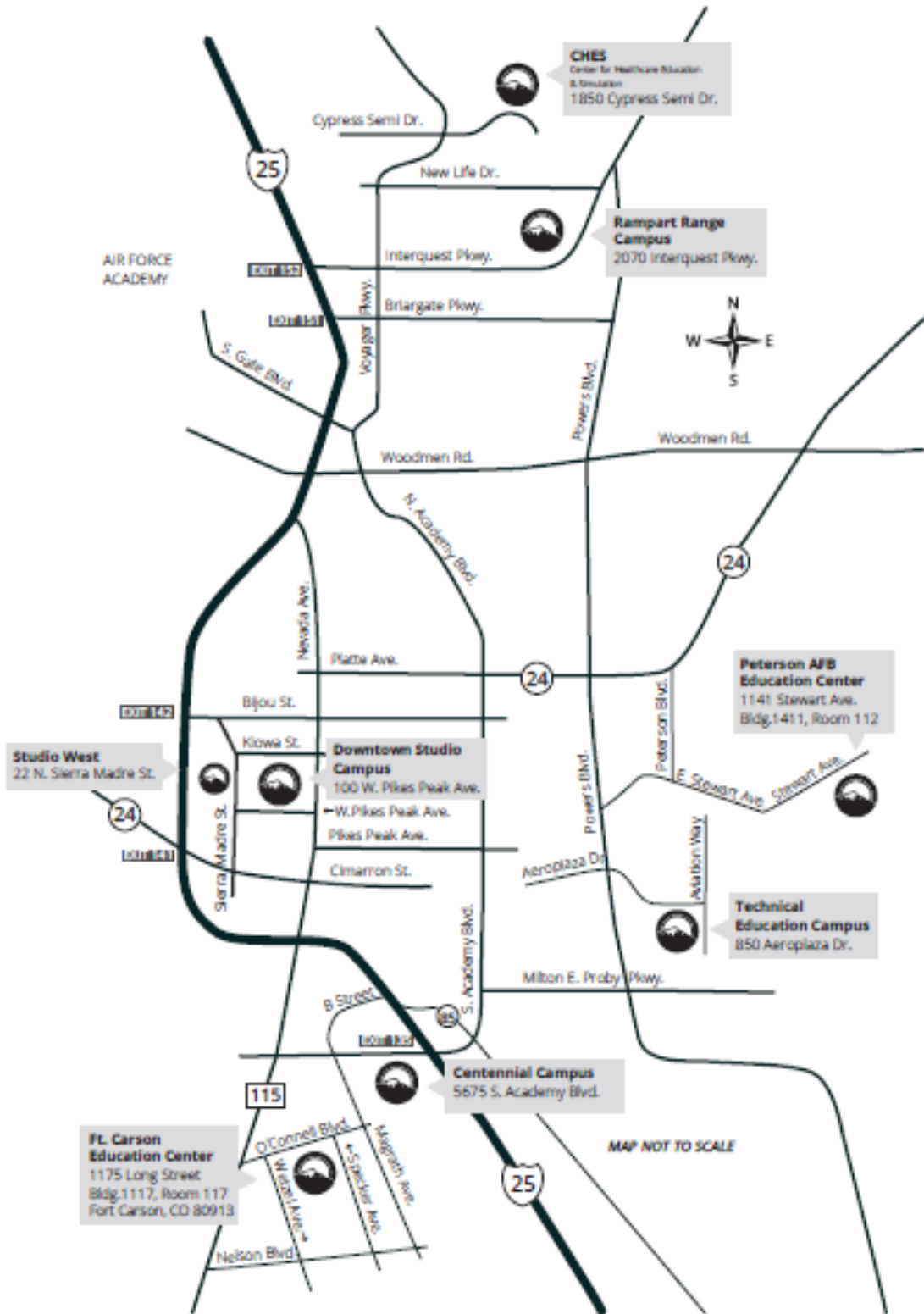
Peterson Air Force Base

Education Center
301 West Stewart, Building 1141, Room 112
PAFB, CO 80914
719-502-4300

719-502-2000 or 800-456-6847
719-358-2453 [video phone for hearing impaired]
www.ppcc.edu

All locations and military sites listed above have been approved by the Higher Learning Commission.

Campus Map



Pikes Peak Community College has three full-service campuses to serve the north, central and south areas of the city. Each offers a full array of academic programs, and enrollment and student services. Rampart Range Campus houses health profession educational programs.

The Downtown Studio Campus is a center for the fine arts and dance. Centennial Campus offers all academic disciplines as well as the occupational and technical programs. PPCC also has branch locations at two military education centers.

About this Catalog

Accreditation

The College is accredited by the Higher Learning Commission.

Changes

Catalog information is subject to change without notice. Published changes, including courses and programs approved after the catalog deadline, are available in the Student Services Centers at all campuses and on the PPCC website. This catalog takes effect at the beginning of each academic year's summer registration.

Nondiscrimination Statement



Pikes Peak Community College does not unlawfully discriminate against individuals affiliated with the College on the basis of sex/gender, race, color, age, creed, national or ethnic origin, ancestry, physical or mental disability, veteran or military status, pregnancy status, religion, genetic information, gender identity, or sexual orientation, or any other protected category under applicable local, state, or federal law (also known as "civil rights laws"), including protections against retaliation and for those opposing discrimination or participating in any grievance process on campus or within the Equal Employment Opportunity Commission or other human rights agencies, in its employment practices or educational programs and activities.

The College has designated Mr. Carlton Brooks, Executive Director of Human Resource Services, as its Affirmative Action Officer/Equal Opportunity Coordinator/Title IX Coordinator with the responsibility to coordinate its civil rights compliance activities and grievance procedures. For information, contact Mr. Carlton Brooks, Executive Director of Human Resource Services, at 5675 South Academy Blvd, Colorado Springs, CO 80906 or at (719) 502.2600.

You may also contact the Colorado Community College System Office, 9101 East Lowry Blvd., Denver, CO 80230, (303) 620-4000; or the Colorado Civil Rights Division, Colorado Springs, CO, (719) 633-7518; or the U.S. Equal Employment Opportunity Commission, Denver, CO, 1-800-669-4000 (Voice) or 1-800-669-6820 (TTY); or the Office for Civil Rights, U.S. Department of Education, Region VIII, Federal Office Building, 1244 North Speer Boulevard, Suite 310, Denver, CO 80204, telephone (303) 844-3417.

TABLE OF CONTENTS

All About PPCC.....	5
Getting Started.....	11
Tuition and Fees.....	14
Academic Standards.....	17
Student Conduct.....	25
Services for Students.....	41
Student Life.....	46
Services for the Community.....	48
Military, Veteran, and Family Members.....	49
Educational Programs.....	51
Degree & Program Requirements.....	55
Associate of Arts Degrees (AA).....	55
Associate of Science Degrees (AS).....	85
Associate of General Studies Degrees (AGS).....	93
Associate of Applied Science Degrees (AAS) and Certificates.....	96
Bachelor of Applied Science Course of Study.....	171
Course Descriptions.....	174
College Administrative Staff.....	285
Faculty & Staff.....	287
Campus Directory.....	302
Index.....	305

ALL ABOUT PPCC

In This Section

History of the College.....	5
Vision Statement.....	5
Mission Statement.....	5
Values.....	5
Required Disclosures.....	5
Faculty and Instructor Resource Guide.....	5
PPCC All Student Handbook.....	6
Planning for a Bachelor's Degree/Transfer Programs.....	6
Career and Technical Education Programs.....	6
Locations and Facilities.....	6
Come See Us.....	7
Use of College Facilities.....	7

History of the College

Pikes Peak Community College was established by a legislative act in 1968 and was then called El Paso Community College. When the College opened its doors in September 1969, more than 800 students attended classes in rented buildings in Old Colorado City on the west side of town. Enrollment grew rapidly, and the need for permanent facilities soon became apparent. The full-service Centennial Campus was built at the south end of Colorado Springs in 1978. In that same year, the name of the College was officially changed to Pikes Peak Community College.

The Pikes Peak Region has experienced significant population growth during the last several decades, driving the community need for expanded educational services. This demand resulted in the opening of the Downtown Studio Campus in central Colorado Springs in 1986 and the Rampart Range Campus in the north end of the city in 1998.

Today, PPCC has grown and expanded to become the largest postsecondary educational institution in Colorado Springs and offers the most widely accessible and affordable education in the region. Serving the residents of El Paso, Teller, and Elbert Counties, PPCC offers more than 125 programs of study in transfer liberal arts and sciences areas and career and technical training.

Currently, Pikes Peak Community College helps over 20,000 people each year begin their education, advance their careers, and enrich their lives.

Vision Statement

Students succeed at Pikes Peak Community College.

Mission Statement

Our mission is to provide high quality educational opportunities accessible to all, with a focus on student success and community needs, including:

- Occupational programs, including certificates, associate and bachelor degrees, for youth and adults in career and technical fields;
- Two-year transfer educational programs to qualify students for admission to the junior year at other colleges and universities; and

- A broad range of personal, career, and technical education for adults.

Values

We value a community built on learning, mutual respect, and diversity. We demonstrate these values in the following ways:

- **Teaching and Learning:** Our primary commitment is to student learning, success, and achievement, while promoting open and universal access to an affordable education and affirming the importance of our facilities and learning environments.
- **Mutual Respect and Accountability:** Because people are our greatest resource, we foster a culture rooted in civility, mutual trust, and support, and hold ourselves accountable for our decisions and actions.
- **Community and Diversity:** We engage and support our community while embracing diversity, as it enriches lives and educational experiences.

Required Disclosures

The College is required to disclose, on a yearly basis, certain types of information to all prospective and current students. These items include

- the Campus Crime & Security Report on page 35
- the consequences of alcohol and drug violations on page 35
- the manner in which the College calculates refunds and repayments as it is stated in this catalog on page 14 and as stated in the Financial Aid Handbook available in the Student Services Centers or online at www.ppcc.edu.
- the graduation rates for the College available www.ppcc.edu/diversity-equity-inclusion/dei-student-graduation-information.

Faculty and Instructor Resource Guide

The Faculty and Instructor Resource Guide contains pertinent information affecting faculty members, current through the date of its issuance. To the extent that any provision of the Guide is inconsistent with State or Federal law, State Board for Community Colleges and Occupational Education Policies (BPs) or Colorado Community College System President's Procedures (SP's), the law, BPs and SPs shall supersede and control. BPs and SPs are subject to change throughout the year and are effective immediately upon adoption by the Board or System President, respectively. Faculty members are expected to be familiar with and adhere to the BPs, SPs as well as College directives, including but not limited to the contents of the Guide.

To access BPs and SPs, see www.cccs.edu/about-cccs/state-board/policies-procedures/.

Nothing in the Guide is intended to create (nor shall be construed as creating) an express or implied contract or to guarantee employment for any term or to promise that any specific process, procedures or practice will be followed, or benefit provided by the College. The College reserves the right to modify, change, delete or add to the information in the Guide as it deems appropriate.

PPCC All Student Handbook

The PPCC All Student Handbook contains pertinent information affecting students, current through the date of its issuance. To the extent that any provision of the Handbook is inconsistent with State or Federal law, State Board for Community Colleges and Occupational Education Policies (BPs) or Colorado Community College System President's Procedures (SP's), the law, BPs and SPs shall supersede and control. BPs and SPs are subject to change throughout the year and are effective immediately upon adoption by the Board or System President, respectively. Students are expected to be familiar with and adhere to the BPs, SPs as well as College directives, including but not limited to the contents of the Handbook.

To access BPs and SPs, see www.cccs.edu/about-cccs/state-board/policies-procedures/.

Nothing in the Handbook is intended to create (nor shall be construed as creating) an express or implied contract or to guarantee for any term or to promise that any specific process, procedures or practice will be followed, or benefit provided by the College. The College reserves the right to modify, change, delete or add to the information in the Handbook as it deems appropriate.

Planning for a Bachelor's Degree/Transfer Programs

Many students begin their college career at Pikes Peak Community College with the eventual goal of completing a four-year, baccalaureate degree (bachelor's degree). Students may complete their associate's degree, or the first two years of four-year bachelor's degrees, at Pikes Peak Community College and then transfer to four-year public or private institutions by following advising guides available for most arts and sciences programs. A good deal of arts and sciences bachelor's degrees may be obtained by completing an additional approximately 60 credit hours at a four-year college or university (an additional two years, at full-time status, beyond obtaining PPCC's associates degrees).

Statewide transfer agreements between most Colorado public four-year colleges and universities and the Colorado Community College system allow students seamless transfer. Several Colorado colleges and universities provide guaranteed admission, special scholarships, and reduced application fees or special privileges for Colorado community college associate of arts (AA) or associate of science (AS) graduates. In addition, Pikes Peak Community College has special agreements with a variety of private in-state and out-of-state institutions. Some associates of general studies (AGS) or associates of applied science (AAS) degrees also have pathways toward obtaining bachelor's degrees. Students should consult with their faculty advisors during their first semester or as early as possible for detailed information about transfer programs. PPCC's transfer web pages provide additional information.

Career and Technical Education Programs

Career and technical education programs can help students get a job, change careers, or improve current job skills. The career and technical programs at Pikes Peak Community College teach the skills needed to work in a business, technical, industrial, service, or health career. Our programs offer curriculum and facilities that simulate the workplace. Depending on the program and the level of training, students may choose a two-year Associate of Applied

Science degree or a Certificate of Achievement that can be earned in less than two years.

All Career and Technical Education (CTE) programs operated at Pikes Peak Community College are approved by the State Board for Community Colleges and Occupational Education. All CTE instructors possess occupational experience and a CTE credential to teach in their area of expertise. Enrollment in Career Start is completed at the high school. Contact your high school counselor or call 719-502-3111 for more information.

Locations and Facilities

To make a college education accessible and convenient to everyone, Pikes Peak Community College has established three full-service campuses in Colorado Springs. The Centennial, Downtown Studio and Rampart Range Campuses provide educational services to the south, central, north and north east areas of the city.

Each full-service campus is a one-stop center for students which includes a Student Services Center, providing admissions, financial aid, records and cashier services. Services include a bookstore, library services, student life and student government offices. Additionally, each campus provides Student Support Services, including advising and testing, Center/tutoring services, career services, and services for students with disabilities. Public bus service reaches the Downtown, Rampart Range, and Centennial campuses from all parts of the city.

CENTENNIAL CAMPUS

5675 South Academy Boulevard
Colorado Springs, CO 80906
719-502-2000, 800-456-6847
719-358-2453 [video phone for hearing impaired]

The Centennial Campus is a modern and well-equipped facility located in southern Colorado Springs. Transfer, career, and technical programs are offered. The full-service campus offers a complete range of student services, including admissions, academic advising, bookstore, financial aid, records, testing, Military and Veterans Programs, tutoring, ACCESSability Services, TRIO Disability Student Support Services, TRIO Student Support Services and career services.

The Centennial Campus provides a library, theatre, lecture halls, videoconference center, computer laboratories, language and culture lab, child development center, meeting and conference rooms, and science, career and technical laboratories. Sports and recreation facilities include a gymnasium, fitness center, tennis courts, soccer field and running track. The Campus Center houses the Student Life Office, the Student Government Association, the Grove, meeting rooms and more.

Convenient parking is available to students, employees, and visitors in lots C, D, and E. Handicapped parking is reserved near most building entrances, including special spaces for wheelchair access. Parking Lot A is reserved for ADA parking. Public bus service comes to the Centennial Campus from all parts of the city. The Centennial Campus is fully accessible to persons with disabilities, including those with wheelchairs. Special assistance is available through the Accessibility Services by calling 719-502-3333.

DOWNTOWN STUDIO CAMPUS

100 West Pikes Peak Avenue
Colorado Springs, CO 80903

The Downtown Studio Campus of PPCC has a convenient, central location in the heart of downtown Colorado Springs. It is located minutes away from the Bijou Exit (142) off I-25. The Downtown Studio Campus is a full-service facility, providing admissions, academic advising, bookstore, cashier, career services, financial aid, records, registration, testing, tutoring, ACCESSability Services, TRIO Disability Student Support Services, TRIO Student Support Services, campus life and activities, and other services for students. The Downtown Studio Campus includes art and dance studios, an art gallery, a performance area, and music practice studios.

The Downtown Studio Campus offers courses leading to Associate of Arts, Associate of Science, Associate of General Studies, and some Associate of Applied Science degrees. The Interior Design, Architecture, Music and Dance Programs make their home at the Downtown Studio Campus. Courses are conveniently scheduled from 8 a.m. to 10 p.m. Monday through Friday and from 8:30 a.m. to 4 p.m. on Saturday.

The Gallery at the Downtown Studio Campus is a free, public art gallery that features works in all media created primarily by artists in the Pikes Peak Region. The Gallery places a strong emphasis on presenting multicultural and multimedia exhibits. Opening receptions are held for each exhibit during which music, dance, or poetry readings frequently enhance the themes of the exhibits. Other events are open to the public at a nominal admission charge.

Convenient parking is available during class hours on the third level (P3) in the Palmer Center Garage. The garage's entrance is just across the street from the Downtown Studio Campus beneath the Antlers Hilton Hotel. Campus users validate parking on campus in the Student Commons area (first floor, north building). Parking is also available at metered spaces on the street.

RAMPART RANGE CAMPUS

2070 Interquest Pkwy
Colorado Springs, CO 80921

The Rampart Range Campus is conveniently located in northern Colorado Springs. The campus provides easy access via the InterQuest Parkway Exit (153) off I-25.

A full array of support services and programs is available to students, including admissions, bookstore, career services, cashier, academic advising, ACCESSability Services, TRIO-Disability Student Support Services, TRIO Student Support Services, instructional support, financial aid, food services, library, placement testing, records, student government, child development center, and campus life and activities.

The Rampart Range Campus offers courses leading to Associate of Arts, Associate of Science, Associate of General Studies, and Associate of Applied Science degrees.

The Campus offers the latest in advanced learning technology. Many classrooms are equipped with student and faculty computers, multimedia presentation capabilities, computerized projection units, and digitized white boards. Computerized lab equipment, and a fiber optic network are part of the instructional technology offered at this campus.

Convenient parking is available at Rampart Range Campus. The Rampart Range Campus is a fully accessible facility. Handicapped parking is reserved near most building entrances, including special spaces for wheelchair access.

ADDITIONAL LOCATIONS AND MILITARY SITES

Pikes Peak Community College offers a variety of courses and programs at varying dates and times that differ from those of the traditional semester at the following locations: for High School students only: Colorado Springs Early Colleges, Early College High School, Harrison High School, Sierra High School; and Fort Carson Education Center and Peterson Air Force Base.

Come See Us

We welcome visitors to Pikes Peak Community College, and we are happy to show prospective students around our campuses. To arrange for a tour of any of our locations, call us at 719-540-PPCC or toll free at 866-411-PPCC.

Use of College Facilities

Outside groups who want to use one of our campuses should contact Events Management at Centennial Campus at 719-502-2333 or go to www.pccc.edu/use-of-facilities. This page will give specifics of what is required as well as cost. Click on "Create A Request" in the red box to complete a request.

ACADEMIC CALENDAR

The following is the Academic Calendar and is subject to change.

Summer 2021 [202210]

Important Dates

March 15 Registration Begins
 July 15 Graduation Application Deadline

Holidays/Special Days

May 31 Memorial Day Holiday, Campuses Closed
 July 4-5 Independence Day Holiday, Campuses Closed

Full Semester [F10]

May 31 Last Day to Register
 June 1 Classes Begin
 June 10 Drop Date
 July 26 Withdraw Date
 August 8 Classes End

1st Bi-semester [BI1]

May 31 Last Day to Register
 June 1 Classes Begin
 June 7 Drop Date
 June 28 Withdraw Date
 July 5 Classes End

2nd Bi-semester [BI2]

July 5 Last Day to Register
 July 6 Classes Begin
 July 12 Drop Date
 August 2 Withdraw Date
 August 8 Classes End

Weekend Start [WKC]

June 3 Last Day to Register
 June 4 Classes Begin
 June 14 Drop Date
 July 26 Withdraw Date
 August 8 Classes End

1st Tri-semester [TR1]

May 31 Last Day to Register
 June 1 Classes Begin
 June 3 Drop Date
 June 18 Withdraw Date
 June 28 Classes End

2nd Tri-semester [TR2]

June 23 Last Day to Register
 June 24 Classes Begin
 June 28 Drop Date
 July 12 Withdraw Date
 July 16 Classes End

3rd Tri-semester [TR3]

July 16 Last Day to Register
 July 17 Classes Begin
 July 19 Drop Date
 August 3 Withdraw Date
 August 8 Classes End

CCOnline 1st Term [CC1]

June 2 Last Day to Register
 June 1 Classes Begin
 June 11 Drop Date
 July 26 Withdraw Date
 August 7 Classes End

CCOnline 2nd Term [CC2]

June 15 Last Day to Register
 June 14 Classes Begin
 June 21 Drop Date
 July 16 Withdraw Date
 July 24 Classes End

Military Session I [MI1]

June 13 Last Day to Register
 June 14 Classes Begin
 June 21 Drop Date
 June 27 Withdraw Date
 August 8 Classes End

Fall 2021 [202220]

Important Dates

March 15	Registration Begins
November 15	Graduation Application Deadline

Holidays/Special Days

September 6	Labor Day Holiday, Campuses Closed
September 7	Campuses Open - No classes
November 24	Campuses Open - No classes
November 25	Thanksgiving Holiday, Campuses Closed
November 26-28	Campuses Open - No classes
Dec 24-Jan 1	Campuses Closed

Full Semester [F15]

August 29	Last Day to Register
August 30	Classes Begin
September 14	Drop Date
November 29	Withdraw Date
December 19	Classes End

Full Semester [F12]

September 19	Last Day to Register
September 20	Classes Begin
October 4	Drop Date
November 30	Withdraw Date
December 19	Classes End

1st Bi-semester [BI1]

August 29	Last Day to Register
August 30	Classes Begin
September 8	Drop Date
October 12	Withdraw Date
October 24	Classes End

2nd Bi-semester [BI2]

October 24	Last Day to Register
October 25	Classes Begin
November 1	Drop Date
December 7	Withdraw Date
December 19	Classes End

Weekend Start [WKC]

September 2	Last Day to Register
September 3	Classes Begin
September 20	Drop Date
November 29	Withdraw Date
December 19	Classes End

Late Start [LAT]

October 5	Last Day to Register
October 6	Classes Begin
October 18	Drop Date
December 6	Withdraw Date
December 19	Classes End

1st Tri-semester [TR1]

August 29	Last Day to Register
August 30	Classes Begin
September 3	Drop Date
September 27	Withdraw Date
October 5	Classes End

2nd Tri-semester [TR2]

October 5	Last Day to Register
October 6	Classes Begin
October 11	Drop Date
November 2	Withdraw Date
November 9	Classes End

3rd Tri-semester [TR3]

November 9	Last Day to Register
November 10	Classes Begin
November 15	Drop Date
December 13	Withdraw Date
December 19	Classes End

CCOnline 1st Term [CC1]

September 1	Last Day to Register
August 30	Classes Begin
September 14	Drop Date
November 22	Withdraw Date
December 11	Classes End

CCOnline 2nd Term [CC2]

October 5	Last Day to Register
October 4	Classes Begin
October 14	Drop Date
November 29	Withdraw Date
December 11	Classes End

CCOnline 4th Term [CC4]

September 14	Last Day to Register
September 13	Classes Begin
September 20	Drop Date
October 15	Withdraw Date
October 23	Classes End

CCOnline 5th Term [CC5]

November 2	Last Day to Register
November 1	Classes Begin
November 8	Drop Date
December 3	Withdraw Date
December 11	Classes End

Military Session I [MI1]

August 29	Last Day to Register
August 30	Classes Begin
September 7	Drop Date
October 12	Withdraw Date
October 24	Classes End

Military Session II [MI2]

September 17	Last Day to Register
September 18	Classes Begin
September 29	Drop Date
November 29	Withdraw Date
December 12	Classes End

Military Session III [MI3]

September 19	Last Day to Register
September 20	Classes Begin
October 1	Drop Date
November 29	Withdraw Date
December 11	Classes End

Military Session IV [MI4]

October 24	Last Day to Register
October 25	Classes Begin
November 1	Drop Date
December 7	Withdraw Date
December 19	Classes End

Spring 2022 [202230]

Important Dates

October 18	Registration Begins
February 15	Graduation Application Deadline

Holidays/Special Days

March 21-25	Spring Break, Campuses Open - No classes
May 14	Graduation Ceremony

Full Semester [F15]

January 18	Last Day to Register
January 19	Classes Begin
February 3	Drop Date
April 18	Withdraw Date
May 10	Classes End

Full Semester [F12]

February 6	Last Day to Register
February 7	Classes Begin
February 21	Drop Date
April 21	Withdraw Date
May 10	Classes End

1st Bi-semester [BI1]

January 18	Last Day to Register
January 19	Classes Begin
January 26	Drop Date
March 3	Withdraw Date
March 13	Classes End

2nd Bi-semester [BI2]

March 13	Last Day to Register
March 14	Classes Begin
March 28	Drop Date
April 28	Withdraw Date
May 10	Classes End

Weekend Start [WKC]

January 20	Last Day to Register
January 21	Classes Begin
February 7	Drop Date
April 18	Withdraw Date
May 10	Classes End

Late Start [LAT]

February 22	Last Day to Register
February 23	Classes Begin
March 7	Drop Date
April 25	Withdraw Date
May 10	Classes End

1st Tri-semester [TR1]

January 18	Last Day to Register
January 19	Classes Begin
January 24	Drop Date
February 15	Withdraw Date
February 22	Classes End

2nd Tri-semester [TR2]

February 22	Last Day to Register
February 23	Classes Begin
February 28	Drop Date
March 28	Withdraw Date
April 5	Classes End

3rd Tri-semester [TR3]

April 5	Last Day to Register
April 6	Classes Begin
April 11	Drop Date
May 3	Withdraw Date
May 10	Classes End

CCOnline 1st Term [CC1]

January 26	Last Day to Register
January 24	Classes Begin
February 8	Drop Date
April 18	Withdraw Date
May 7	Classes End

CCOnline 2nd Term [CC2]

March 1	Last Day to Register
February 28	Classes Begin
March 10	Drop Date
April 25	Withdraw Date
May 7	Classes End

CCOnline 4th Term [CC4]

February 8	Last Day to Register
February 7	Classes Begin
February 14	Drop Date
March 11	Withdraw Date
March 19	Classes End

CCOnline 5th Term [CC5]

March 29	Last Day to Register
March 28	Classes Begin
April 4	Drop Date
April 29	Withdraw Date
May 7	Classes End

Military Session I [MI1]

January 23	Last Day to Register
January 24	Classes Begin
January 31	Drop Date
March 8	Withdraw Date
March 20	Classes End

Military Session II [MI2]

February 4	Last Day to Register
February 5	Classes Begin
February 16	Drop Date
April 13	Withdraw Date
April 30	Classes End

Military Session III [MI3]

February 13	Last Day to Register
February 14	Classes Begin
February 28	Drop Date
April 27	Withdraw Date
May 16	Classes End

Military Session IV [MI4]

March 27	Last Day to Register
March 28	Classes Begin
April 4	Drop Date
May 10	Withdraw Date
May 22	Classes End

GETTING STARTED

In This Section

Advising & Testing.....	11
Class Schedule.....	11
Concurrent Enrollment.....	11
New Students.....	11
Readmit Students.....	11
Transfer Students to PPCC.....	11
International (F1) Students.....	12
Registration.....	12
Satisfying College Course Placement Requirements.....	12

We believe that everyone who is able to successfully complete courses should have a chance to attend college.

Prospective students who are at least 17 years old or have a high school diploma, a GED (High School Equivalency Diploma), or a college degree will, in most cases, be automatically admitted to PPCC.

However, admission to the College does not guarantee admission into a desired program. Some programs are limited to a certain number of students each semester. We have a priority system so that program applicants are selected impartially.

Advising & Testing

Advising & Testing supports student learning by aiding students in deciding what degree or certificate they can pursue to meet their career goals; how to choose courses that provide the shortest path to their chosen goal; and if they are best prepared to start with college level course work. Advising & Testing provides students with information on transferring to 4-year schools; career readiness; faculty advising; and registering for classes. Visit our webpage at www.ppcc.edu/testing or one of our Advising & Testing offices available at all PPCC campuses for any of the following.

- Career counseling (individual and group) to help with decision-making, goal setting, and choosing a college course of study
- Career assessments to match personal characteristics with occupational options
- Explanation of basic skills (placement test) results, and assistance in selecting the correct classes based upon a student's degree and placement results
- Information on course sequence and prerequisites
- Help in adding or dropping classes
- Assignment of a faculty advisor
- Assistance with changing a course of study or faculty advisor, www.ppcc.edu/records/change-of-major
- Employment services to help students market themselves and find a job, www.ppcc.edu/career-services

Class Schedule

Our class schedule is published every semester and is available on the PPCC website at www.ppcc.edu. It lists the time and location for each course. Fall and Spring terms are 15 weeks long and may include a finals week in some areas. The summer term is 10 weeks long.

To provide more flexibility, we offer some classes for 5-weeks, 7 ½ weeks, or other scheduling options.

If you are looking for online classes, PPCC eLearning sections offer flexible scheduling options for students. All PPCC online courses will have an "N" in the section number.

Class schedule information may change without notice.

Concurrent Enrollment

Concurrent Enrollment (CE) is a program for high school students to earn college credit and seek degrees and certificates. Through CE, high school students may take PPCC courses on the college campus, online, or approved high school locations.

ASCENT

Accelerating Students through Concurrent Enrollment (ASCENT) allows students from participating Colorado school districts and who have successfully completed at least 12 postsecondary credits to receive free tuition for up to 24 college credits toward degrees or certificates. Interested students should contact their high school counselor or High School Programs at 719-502-3111 for more information.

New Students

The first step toward enrollment is to complete the College Opportunity Fund application. This application ensures that resident students receive the State higher education stipend. Failure to register will result in higher tuition costs for the resident student.

The next step is to complete an application for admission. Potential students are encouraged to apply online at www.ppcc.edu. Students should apply early to get the best possible start in college.

Readmit Students

Students who have been enrolled at Pikes Peak Community College before but have not attended for three or more semesters, including summer, must re-submit an Application for Admission.

Readmission of military service member students

PPCC will allow readmission of service members to selective application programs or to reenter their original program of study at the academic year of their enrollment if the service member is required to completely withdraw from the institution for a period of more than 30 consecutive days in compliance with Section 484C of the Higher Education Act of 1965 and with Federal Law 20 U.S.C 1091c. Service members who believe they meet this criterion should contact the Department of Military and Veterans Programs (719-502-4200 or mvp@ppcc.edu) to begin the re-admission process.

Transfer Students to PPCC

To transfer credits from another college, students must request that an official transcript be sent for evaluation to the Registrar's Office at PPCC from their prior institution. Request forms are available from the Student Services Centers. (See Academic Standards on page 16).

International (F1) Students

Pikes Peak Community College has a great deal to offer international students! For admissions purposes, PPCC defines an international student as anyone who already possess an F1 Visa or would like to apply for one.

Prospective students may apply to PPCC and then submit the following documents for review:

Proof of English Proficiency. One of the following is needed as evidence of English proficiency:

- Minimum score of 450 (written test), 45 (Internet based test) on the Test of English as a World Language (TOEFL). PPCC's institution code for TOEFL is 4291. Students scoring below 550 (written) or 80 (Internet) may attend PPCC but will need to take our ESL placement test when they arrive at PPCC. They should plan on taking one to three semesters of ESL before beginning their program of study. Students scoring at or above 550 (written) or 80 (Internet), may enroll in courses towards their field of study.
- Minimum score of 5.5 on the International English Language Test System (IELTS). Students scoring below 6.5 may attend PPCC but will need to take our ESL placement test when they arrive at PPCC. They should plan on taking one to three semesters of ESL before beginning their program of study. Students scoring at or above 5.5 may enroll in courses towards their field of study.
- Minimum score of 500 on the Test of English for International Communication (TOEIC). Students scoring below 750 may attend PPCC but will need to take our ESL placement test when they arrive at PPCC. They should plan on taking one to three semesters of ESL before beginning their program of study. Students scoring at or above 750 may enroll in courses towards their field of study.
- Minimum score of 38 on the Pearson PTE The English Language Test. Students scoring below 53 may attend PPCC but will need to take our ESL placement test when they arrive at PPCC. They should plan on taking one to three semesters of ESL before beginning their program of study. Students scoring at or above 53 may enroll in courses towards their field of study.
- Transcripts showing graduation from an English language school.
- If already in the US, passing score on the English as a Second Language (ESL) four part Accuplacer Test, taken on-site at Pikes Peak Community College.
- Proof of English proficiency is waived if the student graduated from a secondary school (high school) with entirely English instruction or has successfully completed college coursework at another US college.

Proof of Financial Resources

- International Student Financial Statement (will be sent after student applies)
- Original supporting bank documents dated within the last three months that show you have sufficient funds for one year of study and living expenses. \$30,000 is required for independent students and \$17,000 for students receiving room and board support from a sponsor (example – family, friend or organization). If sponsored by an individual or organization, please supply a notarized sponsor letter detailing all support that will be provided. If your sponsor/s will also be paying tuition and other academic fees, we will need a bank statement from them, showing at least

\$17,000. If you will be coming with dependents who need an F2 visa, additional funds are required; an additional \$5,000 for a spouse and \$3,750 for each child.

- Although we can accept a COPY of a bank statement in many instances, PPCC may request that a bank statement come to us directly from the bank. We may ask for this at any time during the admissions process.

Academic Records

- Official High School transcript, if highest level of education. If not in English, we also need a certified English translation.
- College transcripts, if applicable. If not in English, we also need a certified English translation. If you wish to have previous college credit applied towards a degree or certificate, an official evaluation of your transcripts must be made by a certified International Transcript Evaluation Service.

Transfer from Another U.S. School

- If you are already in the United States, attending another college as an F-1 student, and would like to transfer to Pikes Peak Community College, please also provide a statement from the international student advisor at your current school that confirms you are in good status.

An admissions application must be completed, and all required documents submitted by:

Summer Semester – April 1
 Fall Semester – July 1
 Spring Semester – November 15

If you already have an F1 Visa and would like to transfer to PPCC, it is a much quicker process and mostly dependent on how long it takes for you to submit all of the required documents. If you are accepted as a student, we would then arrange for your SEVIS record to be transferred from your existing school to PPCC. *The transfer student application and document deadline is 2 weeks prior to the first week of classes for the semester.*

Registration

After meeting with an advisor and selecting a schedule of classes, the next step is to register. The registration period begins several months before the start of each new semester. Students may register by using the Internet, or on-site at the Centennial, Downtown Studio, or Rampart Range Campuses. The class schedule published each semester includes details about how to register. The schedule also explains how to add, drop, or change classes once enrolled. Note that instructors or other College staff are not responsible for dropping you from or changing registration in your classes. A helpful registration guide is available.

Satisfying College Course Placement Requirements

The College assists students with course and educational planning decisions through any of the Advising & Testing centers.

Most students can start in the college-level English and Math classes they need for their degree. Students do this by enrolling in their college-level English and Math classes with a co-requisite college-prep support course. These co-requisite college-prep courses are designed to make sure you have the skills needed to be successful in your college level courses.

To enroll in college-level coursework without a co-requisite college-prep, students must demonstrate College Reading & Writing

Literacy, College Quantitative Literacy, and/or College Algebraic Literacy. College Literacy may be satisfied by meeting any of the following requirements:

- Completed the ACT or SAT tests within the past five years with qualifying scores. Please see ppcc.edu/testing-center for list of qualifying scores;
- Graduated from high school within the last 2 years;

For College Reading & Writing Literacy: completed Junior year English with a "B" or better both semesters

For College Algebraic Literacy: completed high school Pre-Calculus or higher with a "B" or better within the last 18 months

For College Quantitative Literacy: completed high school Algebra II with a "B" or better both semesters

- Have earned a baccalaureate degree from a regionally accredited college or university;
- Have earned a transfer-oriented associate degree (Associate of Arts (AA) or Associate of Science (AS) from a regionally accredited college or university. Excludes Associate of General Studies (AGS) or Associate of Applied Science (AAS) degrees;
- Have completed a college-level English and/or Mathematics course with a "C" or higher from a regionally accredited College or University (within the last 15 years);
- Have successfully completed necessary remedial courses in English and/or Mathematics at another Colorado Community College.

If you meet one or more of the requirements above, please scan and email your supporting documents to testing.center@ppcc.edu or upload through this form ppcc.edu/l/academic-history. To officially transfer your prior college credits to PPCC, you will also need to submit official transcripts to the PPCC Records department.

Students may choose to enroll in college-preparatory coursework if they cannot demonstrate college-readiness. Advising & Testing can recommend the college-preparatory coursework for your degree or certificate program.

Students who wish to enroll in college-level coursework without evidence of College Reading & Writing Literacy, College Quantitative Literacy, and/or College Algebraic Literacy may take a placement test in any of our Advising & Testing centers. For information on how to complete placement testing: ppcc.edu/testing-center.

All new students entering the English as a Second Language (ESL) must take a placement test. This test will place new students into one of three levels: basic, intermediate, or advanced. The test is available by computer at all campuses. ESL students should call 719-502-3535 for further information.

Accommodations are available for students with documented disabilities. Contact Accessibility Services to make arrangements for accommodated placement testing. 719-502-3333.

You must present a valid photo ID to test. All testing stops fifteen minutes prior to closing time.

For information about all testing services and hours of operation: ppcc.edu/testing-center. Centennial Campus Testing Center, 719-502-3370; Rampart Range Campus Testing Center, 719-502-3380; or Downtown Studio Campus Testing Center, 719-502-3390.

Active duty military may take placement tests at Ft. Carson, Bldg. 1117 and Peterson AFB, Bldg. 1141. An appointment is not necessary, but it is recommended that you contact those offices to confirm availability: Fort Carson, 719-502-4200 and Peterson AFB, 719-502-4300.

TUITION AND FEES

In This Section

Tuition	14
Colorado ASSET Bill	14
College Opportunity Fund (COF).....	14
Western Undergraduate Exchange (WUE) Program.....	14
Tuition and Fees (2020-2021)*	15
Student Activity Fees	15
Residency Classification Appeals	15
Refunds/Adjustments	15
Books	15
Financial Aid.....	15
American Opportunity Tax Credit	16
Earned Income Tax Credit/Child Tax Credit	16
Programs.....	16
Foundation Scholarships.....	16
Grants.....	16
Loans.....	16
Employment Opportunities.....	16

Tuition

For tuition purposes, students are considered either in-state or out-of-state when they apply for admission. This practice is governed by Colorado statute. To be entitled to in-state tuition, students must live in Colorado and fulfill specific citizen responsibilities for one full calendar year before they register. Contact the Student Services Centers for more information or see the second page of the Application for Admission form.

New Colorado law (HB 20-1275) grants active duty military and their spouse/child under 23 years of age, or veterans and their spouse/child under 23 years of age both in-state tuition rates and College Opportunity Fund Stipend (COF) eligibility. Students who indicate above military affiliation on their college application will automatically be granted the resident rate with COF. Alternately, students may submit their valid military ID or DD214 via web form at <https://www.pgcc.edu/military/mil-instate-tuition>.

Olympic Training Center. Olympic athletes may pay in-state tuition rates. Student status must be verified by the U.S. Olympic Training Center. A separate form must be submitted to the Student Services Centers prior to the census date each term for which the in-state tuition rate is requested. The College has no obligation to honor late requests, in which case the student may be held responsible for payment of the non-resident tuition rates.

Colorado ASSET Bill

Senate Bill 13-033, also known as Colorado ASSET, allows U.S. Citizens, Permanent Residents, and students without lawful immigration status to receive in-state tuition through attendance and graduation from a Colorado high school or through attendance at a Colorado high school combined with obtaining the GED.

To qualify for in-state tuition under ASSET, students must:

- Have attended a public or private high school in Colorado for at least three years immediately preceding the date the student either graduated from a Colorado high school or completed a general equivalency diploma in Colorado; and

- Be admitted to a Colorado college or university within 12 months of graduation from a Colorado high school or completion of a Colorado GED.
- Students without lawful immigration status must apply for COF and complete an affidavit stating that the student has applied for lawful presence or will apply as soon as he or she is eligible to do so.
- Students without lawful immigration status who graduated or complete their GED prior to September 1, 2013 but were not admitted to a college or university within twelve months after graduating or completing the GED must have been physically present in Colorado on a continuous basis for at least 18 months preceding the start of the semester.
- As with the traditional domicile path, residency classification will be determined based off the information and documents submitted by the student. The burden of proof is on the individual seeking in-state tuition.

College Opportunity Fund (COF)

The State of Colorado historically subsidized higher education for in-state students by giving money directly to the colleges. In 2004 the Colorado Legislature enacted a new law establishing the College Opportunity Fund (COF). Under this new law, the State gives this money for the subsidy to students by sending it to the institution the student designates. This money, known as the College Opportunity Fund stipend, will be applied to students who qualify for in-state tuition and also have lawful presence in the US, to include DACA, ASSET, and students on visas. High school concurrent students and those utilizing military/veteran benefits are COF eligible, regardless of residency status. The college you are attending will receive the money and it will appear as a credit on your tuition bill. Currently the College Opportunity Fund (COF) stipend is estimated to be worth \$40 per credit hour.

Failure to sign up and authorize COF will result in the loss of this stipend. To sign up go to <https://cof.college-assist.org/>. Students can authorize their COF via their student portal.

Estimated Per Credit Hour Base Tuition Calculation 2021-2022

Total estimated base in-state tuition	\$193.35
Minus estimated College Opportunity Fund Stipend	\$40.00
Student's estimated share of in-state tuition	\$153.35

Western Undergraduate Exchange (WUE) Program

Students who are residents of Western Interstate Commission for Higher Education (WICHE) <https://www.wiche.edu/> states may be eligible to request a reduced Western Undergraduate Exchange (WUE) tuition rate which is less than the non-resident rate. WICHE states include Alaska, Arizona, California, Commonwealth of N. Marianas Islands, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming.

Students applying for the WUE program must provide evidence of domicile in the qualifying states and will be required to reapply for WUE each semester. You may pick up a WUE application at any campus at the Student Services Center.

Students are not permitted to apply time spent in the WUE program toward satisfaction of residency requirements for tuition classification purposes. Online courses are not eligible for the WUE tuition rate.

Tuition and Fees (2020-2021)*

Tuition for in-state and out-of-state.

The in-state tuition rate for 2020-2021 is \$153.35 per credit hour after COF (see above). The out-of-state tuition rate for 2020-2021 is \$629.25 per credit hour. There are some courses that have higher tuition rates. Please refer to the tuition and fee chart at www.pgcc.edu/paying-college/tuition-fees/ for more information.

Student fees.

The student fee rate for 2020-2021 is \$10.33 per credit hour plus a \$14.35 registration fee, and a \$10.00 Bus Pass Fee.

Course fees.

Some courses have extra fees ranging from \$4.55 per credit hour to \$1,524.00 per course. Refer to www.pgcc.edu/paying-college/tuition-fees/ for a detailed list.

**Tuition and fees are set by the State Legislature and Governing Board late in the fiscal year and potential increases for the 2021-2022 year are unknown at the time of this printing. Tuition and fee rates for off-campus locations may vary according to operational costs.*

Student Activity Fees

Mandatory fees associated with enrollment in the college and/or campus that are assessed for a specific purpose. These fees include, but are not limited to, student centers, recreation, student government, contract health services, and/or similar services and facilities; non-bonded parking fees; and any general fee, the revenue from which is appropriated by student government for a specific purpose. Specific guidelines are provided in the PGCC Institutional Fee Plan.

Residency Classification Appeals

Out-of-state students pay higher tuition than in-state students. Students classified as out-of-state who believe that they are in-state may appeal by picking up a "Petition for In-State Tuition Classification" from the Student Services Centers. The petition and required supporting documents must be submitted to the Student Services Centers by the deadline listed in the class schedule. Turning in a petition does not guarantee that residency status will be changed. If the petition is denied, the student must drop classes by the deadline or pay out-of-state tuition and fees.

To challenge the ruling on a petition, students may appeal to the Tuition Classification Review Committee. Ask the Student Services Centers personnel for details.

The general requirements for Colorado residency are as follows:

- 12 months of continuous domicile in the state of Colorado
- Have filed Colorado state income tax returns as a Colorado resident
- Have a Colorado driver's license

For the entire Colorado policy regarding residency, go to higherred.colorado.gov/Finance/Residency/default.html. All information used to prove Colorado residency must be submitted to the Student Services Center by the first day of class for the full term.

Refunds/Adjustments

To receive a tuition refund, or an adjustment, students must drop classes by the deadline listed in the class schedule. No refunds or adjustments will be made after that date except in rare cases. Appeal forms are available in the Student Services Centers or on the Internet. Contract programs may have different refund procedures.

Books

The bookstores at the Centennial and Rampart Range Campuses stock books and supplies needed for courses offered at that campus. A wide variety of other school supplies and PGCC insignia items are also available at all three campus bookstores.

Textbooks may be purchased from our bookstore online at www.pgccbookstore.com. Course material information in accordance with the College Opportunity and Affordability Act is available at www.pgccbookstore.com.

The bookstores have several opportunities for you to sell your eligible books back. The demand for books and the condition of your books will determine eligibility for all buyback opportunities listed below.

- "Top Dollar Buyback" is scheduled at the end of each semester. This is an opportunity for you to sell your books back for up to 50 percent of the bookstore purchase price.
- Buybacks are also scheduled at the beginning of each term. This buyback offers wholesale value for your eligible books.
- In addition, between scheduled buyback events, the bookstore will review your books for buyback eligibility on a daily basis. If eligible, we can pay you wholesale value for your books. This is available online at www.pgccbookstore.com or in one of our stores during normal business hours. There are circumstances where buyback proceeds may be applied to outstanding balances at the College.

Financial Aid

There are numerous financial resources available for students who attend Pikes Peak Community College. Students should start the process by applying online for the Free Application for Federal Student Aid (FAFSA). The application will explain which tax return and income information students need for reference and federal tax returns may also be downloaded automatically if the student has filed an electronic tax return two weeks prior to doing the FAFSA. This application is available on the Internet at www.FAFSA.gov. If signed electronically, this process takes less than a week for the school to receive. Students are encouraged to apply as soon as possible. Applications for the next academic year (beginning in late August) were available October 1. To avoid delays, please complete the FAFSA and do so as soon as a decision is made to apply for admission to the College.

No other documentation is necessary until the U.S. Department of Education processes the request. If it is necessary for the school to request more information after the results have been received, notifications are made via the student's college assigned email.

To learn more about financial aid programs, how aid is distributed, student rights and responsibilities, or policies and procedures, please contact the Student Services Center or review this information online at www.pgcc.edu.

American Opportunity Tax Credit

Under the American Recovery and Reinvestment Act (ARRA), more parents and students will qualify for the American Opportunity Tax Credit to help pay for college expenses.

The American Opportunity Tax Credit modifies the existing Hope Credit. The AOTC makes the Hope Credit available to a broader range of taxpayers, including many with higher incomes and those who owe no tax. It also adds required course materials to the list of qualifying expenses and allows the credit to be claimed for four post-secondary education years instead of two. Many of those eligible will qualify for the maximum annual credit of \$2,500 per student.

The full credit is available to individuals whose modified adjusted gross income is \$80,000 or less, or \$160,000 or less for married couples filing a joint return. The credit is phased out for taxpayers with incomes above these levels. These income limits are higher than under the existing Hope and Lifetime Learning Credits.

The AOTC applied to tax years 2009 and 2010 under ARRA. The credit was extended to apply for tax years 2011 and 2012 by the Tax Relief and Job Creation Act of 2010. The American Taxpayer Relief Act of 2012 extended the AOTC for five years through December 2017.

If you still have questions about the American Opportunity Tax Credit, these questions and answers might help.

Earned Income Tax Credit/Child Tax Credit

The Earned Income Tax Credit or the EITC is a refundable federal income tax credit for low to moderate income working individuals and families. Congress originally approved the tax credit legislation in 1975 in part to offset the burden of social security taxes and to provide an incentive to work. When EITC exceeds the amount of taxes owed, it results in a tax refund to those who claim and qualify for the credit.

To qualify for Earned Income Tax Credit or EITC or simply called EIC, you must have earned income from employment, self-employment or another source and meet certain rules. In addition, you must either meet the additional rules for Workers without a Qualifying Child or have a child that meets all the Qualifying Child Rules for you. Taxpayers must meet certain requirements and file a tax return, even if they do not have a filing requirement.

For more information including help in determining whether individuals and their families qualify, go to www.irs.gov/publications. Please consult this website before you file your taxes. It is estimated that 25 percent of all eligible individuals do not take advantage of this program.

The Child Tax Credit is a credit that may reduce your tax by as much as \$1,000 for each of your qualifying children. The Additional Child Tax Credit is a credit that you may be able to take if you are not able to claim the full amount of the Child Tax Credit. You may not qualify for the Child Tax Credit but qualify for the Additional Child Tax Credit.

Programs

There are four types of financial aid:

- Scholarships are generally based on school grades, need, or accomplishments in a particular area of study.
- Grants are federal and state programs based on demonstrated financial need.

- Loans provide funds while students are attending school but must be repaid.
- Work-study agreements allow students to work for the College while enrolled.

Scholarships and grants do not need to be repaid. The Student Financial Aid Handbook, available in the Student Services Centers or online at www.pgcc.edu/financial-aid-office/financial-aid-forms describes each of these programs.

Foundation Scholarships

The Pikes Peak Community College Foundation provides scholarship support to many PCC students each year. Go to www.pgcc.edu/scholarships for more information about available scholarships and how to apply. Questions can be directed to scholarships@pgcc.edu.

Grants

- Colorado Student Grants (CSG)
- Federal Pell Grants (PELL)
- Federal Supplemental Educational Opportunity Grants (FSEOG)

Loans

- Federal Direct Stafford Student Loans (subsidized and unsubsidized)
- Federal Direct Parent Loans (PLUS)
- Studentloans.gov allows students and parents meeting federal eligibility requirements to complete a Master Promissory Note for a Stafford and/or PLUS loan online.

Employment Opportunities

- Federal College Work-Study Employment
- Colorado Work-Study Employment
- VA Work-Study Employment (See Military & Veterans Programs for more information)

ACADEMIC STANDARDS

In This Section

Maximum Course Load.....	17
Change of Major/Program.....	17
Credit by Examination.....	17
Transfer to PPCC.....	17
International Transcript Evaluations.....	17
Transcript Requests.....	18
Grading System.....	18
Grading Options.....	20
Grade Changes.....	21
How to Calculate Your GPA.....	21
Repeated Courses.....	21
Academic Renewal.....	21
Academic Progress Standing.....	21
Academic Concerns.....	22
Credits in Residence.....	23
Term Academic Honors.....	23
Graduation Honors.....	23
Application for Certificate or Degree.....	23
Graduation Ceremony.....	23
Assessment of Student Learning.....	23
Research Activities.....	24

Students are expected to attend all classes, laboratories, and shops as scheduled unless there is a compelling reason to be absent.

Maximum Course Load

Fifteen (15) credit hours is considered to be the standard course load for a student enrolled in a given semester. This will vary however by degree and/or certificate and whether a student is a full-time or part-time student. Twelve (12) credit hours is considered the minimum for full-time enrollment in a given semester, and anything below 12 credit hours is considered part-time enrollment. The maximum course load that a student can enroll in on their own without restriction is 18 credit hours. Any student who wants to enroll in more than 18 credit hours and up to 21 credit hours in a given semester can receive an override on the maximum credit hour restriction from an academic advisor in Advising & Testing, provided the student has a cumulative grade point average of 3.0 or higher in college level course work. Any student seeking to enroll in more than 21 credit hours and up to 24 credit hours in a given semester must receive Academic Dean permission. For any student wanting to enroll in more than 24 hours in a given semester the permission of the Vice President for Instructional Services is required.

Certain career and technical programs approved by the State Board for Community Colleges and Occupational Education may require students to enroll in up to 24 credit hours per semester. For such programs, students will be allowed to enroll in all necessary courses.

Student workload for a course should be estimated according to the following formula: Two hours of outside preparation for every one hour of lecture and one hour of outside preparation for every two to three hours of laboratory time. Any course syllabus that indicates different preparation times than these takes precedence over this general instruction.

Change of Major/Program

Students may declare and/or change a program of study at any time during the term in which they are enrolled. Prior to changing their major, students are strongly encouraged to meet with an academic advisor in the Advising & Testing office and the Financial Aid Office to discuss the impact changing a course of study will have on an educational plan. A change of major places students under the academic and curriculum requirements of their new program as published in the current college catalog. The form can be found at www.ppcc.edu/records/change-of-major.

Credit by Examination

Students may take a comprehensive examination for credit if they are enrolled in a course and have the approval of their instructor and dean. Students must complete the examination by the census date for the course and will receive the grade earned on the examination as a final grade for the course. Students may attempt a test-out only once per course.

Transfer to PPCC

All credits earned at regionally accredited colleges or universities (including PPCC) or other approved educational institutions may be applied toward fulfilling PPCC program requirements. Transferability of credit is based on the following conditions:

- Credits must have been earned within 15 years prior to admission to PPCC.
- Courses in which a grade of C- or above was earned will be accepted in transfer when the courses are applicable to PPCC programs and in accordance with PPCC requirements. Credit will be transferred only from an official transcript from the originating institution.

Students who have credits they wish to transfer to PPCC that can replace a substandard grade earned at PPCC must see an advisor to initiate that request. If approved, this will result in the points associated with that grade being excluded from the student's cumulative GPA. The grade earned at PPCC will still appear on the student's official transcripts. Other institutions receiving a PPCC transcript for transfer of academic courses are not bound by this college policy and may choose to calculate the student's transfer GPA to include all grades, even those excluded by PPCC under this policy.

International Transcript Evaluations

Students who have attended international institutions and want their credits evaluated for transfer must first have the international transcripts evaluated by a recognized member of the National Association of Credential Evaluation Services (NACES) and have an official copy of their course-by-course credit evaluation report sent directly to Pikes Peak Community College (PPCC). Students who plan to study a program at PPCC similar to what they studied at their former international institution, might be able to transfer some credits from that program to their new program at PPCC. Not all credits will transfer. Transferability of credit is based on the following conditions:

- The courses taken at an international institution must be comparable to what we offer at PPCC to be accepted for transfer.
- College credits must have been earned within 15 years prior to admission to PPCC.
- PPCC only accepts college-level courses with a grade of C or better.
- Students may also be required to provide English-translated course descriptions for courses that they wish to have transferred.

Steps to transferring in college credits:

Step 1: Apply for PPCC admissions.

Step 2: Declare a degree or certificate program.

Step 3: Submit an official copy of the NACES course-by-course evaluation report to the PPCC Records Office located at the Centennial Campus. Official copy must be in a sealed envelope from the evaluation service – do not open it.

Students may also request to have the evaluation sent directly to:

Pikes Peak Community College
Attn: Records Office, Box C-8
5675 S. Academy Blvd.
Colorado Springs, CO 80906

The Records Office will determine if PPCC can transfer some of your credits to a PPCC degree program.

A complete list of approved NACES members can be found at www.naces.org.

Below are recommended evaluation services for a course by course evaluation of your international educational record.

Educational Credential Evaluators, Inc.

Phone: (414) 289-3400

Website: www.ece.org

Email: eval@ece.org

World Education Services

Phone: (212) 966-6311

Website: www.wes.org

Josef Silny & Associates

Phone: (305) 273-1616

Website: www.jsilny.com

Transcript Requests

PPCC has partnered with Parchment to manage the ordering, processing, and secure delivery of official student transcripts. Students may request copies of their official transcripts from PPCC by filling out a transcript request form. The transcript cost is based on the method of delivery and destination. During the ordering process you will be able to see the exact charge prior to entering your credit card information. Transcripts are not released until all accounts with PPCC are current. Transcript request instructions and costs can be found online at www.ppcc.edu/records/request-transcripts.

Grading System

APPLICATION

This procedure applies to the Colorado Community College System, including its Colleges (CCCS or System).

BASIS

This procedure establishes System-wide standards for grading, repeating courses, terms dates, credits in residence and honors designations.

DEFINITIONS

Attempted Grades: Grades for a course in which a student enrolled and attempted to complete.

Developmental Education: Courses beginning with the digit “0” designed to enhance students’ skills in Math, English, or other academic fields.

Developmental Grades: Grades for Developmental Education courses.

Earned Grades: Grades for a course that has been completed by a student.

GPA: Grade Point Average on a 4.0 scale.

Hours in Residence: These are credit hours completed at an institution or within a system.

PROCEDURES

Common Grading Symbols:

In order to standardize grading across the System, Colleges will use grades from a shared set of grading symbols. The full list of grades and symbols may or may not be used by all Colleges, but all grades issued by Colleges must be from the list below:

Grade	Quality Points	Interpretation
A	4	Excellent or Superior
B	3	Good (Above Average Achievement)
C	2	Average
D	1	Deficient
F	0	Failure Incomplete
I		Incomplete (Rolls to an F if not completed within required time period)

Note: In order to be eligible for an incomplete, a student is required to have completed over 75% of the coursework with a ‘C’ or better and must finish the coursework by the end of the next term, excluding summer. Colleges may make exceptions on a case-by-case basis.

Pass/Fail Grades:

P – Pass

F – Fail

A request for the P/F option must be submitted to the registration office. The P/F option may not be appropriate for courses.

College catalogs should identify the maximum number of P/F credits that may be applied to a degree or certificate.

A “P” grade will indicate that the quality of students’ work in the course is equivalent to “C or better.” “P” will count in attempted and earned credits but will not carry any quality points. Therefore, “P” grades will not be included in GPA calculations, however “F” grades will.

Developmental Grades:

P/A – Passing (A-level) work in a developmental course
 P/B – Passing (B-level) work in a developmental course
 P/C – Passing (C-level) work in a developmental course
 F/D – Not-passing (D-level) work in a developmental course
 F/F – Not-passing (F-level) work in a developmental course
 I/F – Incomplete for developmental courses (Rolls to F/F if not completed within required time period)

Developmental Grades will not be included in a student's GPA or count towards attempted credits. GPAs for term recognition such as President's List, Vice President's List and Dean's List will not include developmental course grades in the calculation.

In order to be eligible for an incomplete, a student is required to have completed over 75% of the coursework with a 'P/C' or better and must finish the coursework by the end of the next term, excluding summer. Colleges may make exceptions on a case-by-case basis.

Withdrawal Grades:

W – Withdrawal – Student was withdrawn at their request after drop deadline, but prior to withdrawal deadline.

WX – Student was administratively withdrawn through appeal, no fault, etc.

WD – Student was administratively withdrawn for cause.

Transfer Grades:

A* – Transfer equivalent to an "A" standard grade

B* – Transfer equivalent to a "B" standard grade

C* – Transfer equivalent to a "C" standard grade

D* – Transfer equivalent to a "D" standard grade

F* – Transfer equivalent to an "F" standard grade

S* – Transfer equivalent to an "S" standard grade

P* – Transfer equivalent to a "P" standard grade

"C" or better grades will be accepted in transfer. Colleges may choose to transfer "D" grades on a case-by-case basis. Colleges will determine by program whether a "D" grade may be used to meet degree or certificate requirements. Even if a CCCS College accepts a D grade in transfer, it may nullify certain transfer agreements and does not guarantee that it will be accepted at other institutions of higher education. Satisfactory grades, "S" may be considered "P" grades for transfer purposes.

Other Grade Codes

*	Transfer Grade
AU	Audit
AW	Administrative Withdrawal (Prior to Summer 2021)
CNV	No Grade (Used for High School Level classes only)
CPL	Credit awarded through Credit for Prior Learning (Prior to Fall 2015)
CR	Credit
IP	In Progress
NC	No Credit
PLA	Prior Learning Assessment (Effective Fall 2015)
S	Satisfactory (Prior to Summer 2021)
S/A	Satisfactory (A-level) work in a developmental course (Prior to Summer 2021)
S/B	Satisfactory (B-level) work in a developmental course (Prior to Summer 2021)
S/C	Satisfactory (C-level) work in a developmental course (Prior to Summer 2021)
SP	Satisfactory Progress (Prior to Summer 2021)
U	Unsatisfactory (Prior to Summer 2021)

U/D Unsatisfactory (D-level) work in a developmental course (Prior to Summer 2021)

U/F Unsatisfactory (F-level) work in a developmental course (Prior to Summer 2021)

W Withdrawal

Z Grade not yet reported

AU – Audit

By auditing a course, a student may participate in course activities, but does not receive a formal transcript grade. Students must indicate intent to audit a course at registration or by the deadline listed in the course schedule. Audited courses are not eligible for the College Opportunity Fund stipend. Students will be responsible for the full in-state or out-of-state tuition. Audited courses do not meet the credit hour requirements for financial aid or veteran benefits and may not be applied to certificates or degrees.

CPL – Prior Learning Credit

A symbol of "CPL" indicates that the course and credits to which it is attached were awarded according to BP 9-42, Credit for Prior Learning.

I – Incomplete

The Incomplete grade is a temporary grade and is designed for students who, because of documented illness or circumstances beyond their control, are unable to complete their course work within the semester, but have completed a majority of the course work (defined as at least 75 percent of all course assignments and tests) in a satisfactory manner (grade C or better).

If circumstances beyond the student's control prevent the student from completing a test or assignments at the end of the term, then it is the student's responsibility to initiate the request for an Incomplete grade from the instructor. The instructor will determine whether the student has a reasonable chance of satisfactorily completing the remaining course activities in a timely manner.

In requesting an Incomplete grade, the student must present to the instructor the documentation of circumstances justifying an Incomplete grade.

The instructor will complete and sign an Incomplete Grade Contract and will submit it to Student Services with final grades for the semester. The instructor must assign an incomplete grade on the regular grade roster in a timely fashion.

Incomplete Grade Contract must include the following information:

1. Student Name (F, MI, L)
2. Student ID #
3. Course Number and Section
4. Reason for assigning a grade of incomplete (statement of extenuating circumstances)
5. Work to be completed for removal of incomplete grade (instructor should be very specific including the work to be done and how the final grade is to be calculated)
6. Evidence of completion of 75 percent of the semester course work
7. Completion of a work plan that includes the following
 - What, when and how assignments and tests will be submitted to complete the course,
 - The time period in which the work must be completed.
8. Instructor Signature and Date
9. Student Signature and Date

Students are encouraged to let instructors know, as soon as possible, if they are having difficulties with any part of the course. In the event that a student and instructor cannot reach resolution concerning an Incomplete, then the student should contact the Chief Instructional Officer of the College.

Military personnel and emergency management officials who are required to go TDY in the middle of a term should contact their instructor for special consideration. Documentation of official TDY assignment is required and must be approved by the Chief Instructional Officer.

Active Duty exception: The Department of Defense requires all Incomplete Grades assigned in classes funded through Tuition Assistance to receive a final grade and have it reported to the respective branch of service within 120 days from the end of term date.

Incomplete grades which are not converted to a letter grade by the instructor after one subsequent semester (not including summer semester) will revert to an F grade. If the student would have earned a letter grade higher than an F without completing the work, faculty should be encouraged to submit that higher grade before the automatic conversion to F.

PLA – Prior Learning Assessment

A symbol of "PLA" indicates that the course and credits to which it is attached were awarded according to BP 9-42, Prior Learning Assessment.

P/A, P/B, P/C

These are pass grades awarded only for developmental courses. The A, B, and C indicate the level of satisfactory/pass performance. These grades are not included in the GPA calculation. The course will count for attempted and earned credits.

F/D, F/F

These are fail grades awarded only for developmental courses. The D and F indicate the level of unsatisfactory/fail performance. These grades are not included in the GPA calculation. The course will count in attempted credits but will not carry earned credits.

S – Satisfactory/ P – Pass

The satisfactory/pass grade is equivalent to a grade of "C or better." The course will count in attempted and earned credits but will not carry quality points.

U – Unsatisfactory/ F – Fail

The unsatisfactory/fail grade is equivalent to a "D" or "F" grade. The course will count in attempted credits but will not carry earned credits or quality points.

SP – Satisfactory Progress

This symbol is limited to certain approved courses that extend beyond the end of a normal semester. No academic credit is awarded until the course is completed.

W – Withdrawal

The "Withdrawal" grade is assigned when a student officially withdraws from a course. A withdrawal can only be processed during the first 80 percent of the course. No academic credit is awarded. The course will count in attempted hours.

WD, WX – Administrative Withdrawal

This "withdrawal" grade is assigned by the College when a student has been withdrawn for administrative reasons. No academic credit is awarded. The course will count in attempted hours.

Z – No Grade Submitted

The grade of "Z" is a temporary grade entered by the Registrar when a grade is not received from the course instructor. This "Z" grade is replaced, and credit is awarded upon the Registrar's receipt of the grade.

Last Date of Attendance

Faculty are required to provide the last date of attendance for each student who is awarded an F or U/F grade.

Repeat Field

The Repeat Field on the transcript will be marked I – Include in hours and GPA calculation, A – Exclude from earned hours and GPA calculation, or A – Exclude from earned hours but count in GPA calculation.

NOTE: Courses with a grade of D or F are not generally transferable and will not transfer to other institutions under GT Pathways or the 60+60 Bachelor's Degree Transfer program.

Grading Options

Satisfactory/Unsatisfactory / Pass/Fail: students may request to take up to six credit hours each semester on a Satisfactory/Unsatisfactory (SU) / Pass/Fail (PF) grading basis. They may take a maximum of 15 credit hours under this grading option while enrolled at PPCC. (Credit hours earned in a course where SU / PF is the only grading standard count toward this 15-hour maximum). Students must have prior approval by the appropriate division dean for each course unless the course is only offered with the SU / PF option. This option must be requested at the time of registration. After the drop/add period, this option may not be changed except by written recommendation from the appropriate division dean and approval by the Vice President for Instructional Services. Pikes Peak Community College considers a grade of C or better to be satisfactory/passing. A satisfactory/pass grade earned under this option does not affect the Grade Point Average (GPA) but increases the total number of credit hours passed. Grades of D or F will be considered unsatisfactory/fail, will affect the GPA, and will increase the total number of credit hours attempted.

Audit: students may register to audit any course by indicating this option on the registration form at the time of enrollment. The audit option is not available online. The regular tuition rate applies. After the posted drop date, students may not change their registration from credit to audit, or from audit to credit, except by written recommendation from the appropriate division dean and approval by the Vice President for Instructional Services. Audit grades do not transfer and are not computed in the GPA. Courses taken by audit do not count toward enrollment status for financial aid or veterans' educational benefits and are not eligible for the COF stipend.

Grade Changes

A change of grade (other than from an Incomplete) is permitted only as a result of faculty/instructor or administrative error in calculating, posting, or recording a grade.

A student has one full year from the time in which the grade was issued to submit a written request for a grade reevaluation to the faculty member. The process is as follows:

Grade review with faculty/instructor. If no resolution is reached or satisfactory explanation given, then:

Review by department chair. If no resolution or satisfactory explanation, then:

Review by division dean or assistant dean. If no resolution is reached or satisfactory explanation given, then:

Review by the Vice President for Instructional Services or the appointed Assistant to the Vice President for final resolution.

An Incomplete (I) grade may be removed when the remaining class objectives are completed by the date indicated on the "Incomplete Course Agreement" form or no later than the end of the next full 15-week semester. The resulting change of grade is made by the instructor of record and is approved by the appropriate instructional division dean. Course work not completed within the allotted time will be assigned a Failing (F) grade. Students may not re-enroll in a class in which an incomplete grade is pending, since according to the College's definition of enrollment, they are still enrolled.

How to Calculate Your GPA

Grade Point Average (GPA) is calculated by dividing the total amount of grade points earned by the total amount of credit hours attempted. It may range from 0.0 to 4.0. Satisfactory/Unsatisfactory (S/U) grades are not factored in the student's GPA. Incompletes (I) or Withdrawals (W) do not receive grade points and do not have an effect on the GPA.

Repeated Courses

When a course is repeated, regardless of initial grade earned, the highest grade earned will be calculated in the GPA. However, all grades earned at PPCC will appear on the transcript. A course may be used only once to meet graduation requirements for any degree or program.

Academic Renewal

Principle

Designates parameters for Academic Renewal.

Guideline

A maximum of 30 hours can be excluded from the GPA.

- Courses and grades approved for Academic Renewal remain on the transcript but are excluded from the GPA calculation/s.
- Academic Renewal applies to D, F and U grades only.
- In order to apply for Academic Renewal, students must wait a minimum of two academic years from the last term being considered for Academic Renewal.
- Students must be enrolled and have completed at least 6 hours with a 2.0 term GPA to be awarded Academic Renewal. For a Reverse Transfer Degree only, the student may fulfill this requirement, by demonstrating enrollment in at least 6

credit hours with a 2.0 term GPA during last semester of attendance at the four-year institution.

- Students can only apply for Academic Renewal once, and it is not reversible.
- Students at Pikes Peak Community College are required to meet with an academic advisor prior to submitting a request for Academic Renewal.

Academic Progress Standing

Application

For students who have completed fewer than 9 credit hours, the college will monitor satisfactory progress through an Academic Alert process. These students are not subject to Academic Standing.

Academic Standing applies to all students who have completed 9 or more credits at a CCCS college, regardless of the number of term credits they attempt from that point forward. Academic Standing shall be applied consistently and uniformly within each CCCS institution. All colleges will determine Academic Standing following the posting of the majority of term grades for each semester. Students placed on probation or suspended will be notified of their status. Suspended students will not be allowed to attend any CCCS college in the subsequent semester/s unless an appeal is approved. Academic Standing status will be noted on the advising, official, and unofficial transcripts. The Academic Standing of a student is not specific or limited to the home institution; it does impact a student's enrollment at other CCCS colleges.

Principle

Designates a practice for measuring and notifying students of their academic standing.

Guideline

Recognizing the value of measuring academic progress for all students, the Colorado Community College System (CCCS) has established the following practice and procedures for measuring and notifying students of their academic standing. This procedure is intended to be informational and helpful, but also establishes clear standards of academic progress that must be met and maintained in order to be a successful student in our colleges. CCCS colleges are encouraged to devise and implement appropriate Academic Alert strategies early in the term to assist students who are experiencing academic difficulties. A student's academic standing at one college will impact academic standing at another CCCS college.

Definitions:

Only college level classes will be used to calculate term and cumulative GPA's. This includes summer term courses.

Only courses taken "in residence" will be used for this procedure; "In residence" means taken at the student's home institution. Courses taken elsewhere and transferred in do not apply. The GPA calculations for this procedure may not match those used for financial aid purposes or athletic eligibility.

Cumulative Grade Point Average will be abbreviated as CGPA.

Term Grade Point Average will be abbreviated as TGPA.

Practice Standards:Initial Standing

Student has completed fewer than 9 cumulative credit hours with a CGPA => 2.00 for all classes completed.

Academic Alert

Student has completed fewer than cumulative 9 credits with a CGPA < 2.00 for all classes completed.

Good Standing

Student has completed at least 9 cumulative credit hours and has a CGPA => 2.00 for all classes completed.

Probation

Student has completed at least 9 cumulative credit hours and has a CGPA < 2.00 for all classes completed.

Returning to Good Standing

By the conclusion of the Academic Probation term, the student must raise their CGPA to at least 2.0. If this condition is met, the student returns to Good Standing.

If a student on Academic Probation earns a TGPA of at least 2.00 for all classes completed during the term but fails to raise their CGPA to at least 2.0 for all classes completed, the student will be allowed to attend the next term but will remain on Academic Probation.

Suspension

If a student on Academic Probation earns a TGPA of less than 2.0 for all classes completed, the student will be suspended and will not be allowed to enroll at any CCCS College for the next term, excluding summer term (as summer term may not be used as a "suspension term").

Suspension Rules:

- Summer term may not be used as a "suspension term".
- Summer term may be used to remediate (improve) the GPA. If a student wishes to enroll for summer term after being suspended, they will need to follow their home institution's process.
- Initial suspension is for one term, excluding summer term.
- A second suspension is for two terms, excluding summer term.
- If a student, who has served the suspension time for initial suspension or second suspension, wishes to return, the student will be allowed to re-enroll only after meeting with an academic advisor at the CCCS College that the student wishes to attend. The student will be placed on Academic Probation.
- A third suspension is for two full years, or 4 academic terms excluding summers.
- If a student, who has served the third suspension time of two years, wishes to return, the student must meet with an advisor from the CCCS College the student wishes to attend in order to get their suspension hold removed.

Suspension Appeals:

- Students may appeal their suspension based on procedures developed by their home college or the CCCS College they wish to attend. At a maximum, students may appeal to their home college and to one other CCCS College of their choice.
- If the student's suspension appeal is approved, the student will be placed on Academic Probation.

- If the student's suspension appeal is not approved, the student may be dropped from all courses registered for in upcoming terms at their home college. Students are ultimately responsible for their enrollment and need to check their enrollment schedule for accuracy.
- The student needs to check with their home college regarding enrolling for summer term classes.

PPCC Policy

At the conclusion of each semester students will receive their grades and be notified by the Registrar regarding their Academic Standing via email to their college assigned student email.

Students placed on Academic Suspension will be dropped from their classes.

For students on Academic Suspension there is an appeal process that is outlined in the notification they receive from the Registrar regarding their academic standing.

Students wishing to file an appeal for an exception to the academic suspension policy need to:

1. Students will be required to complete an Academic Suspension Appeal Form
2. Students will be required to submit a letter of appeal
3. Students will be required to submit a copy of their most recent unofficial transcript
4. Students can submit any other relevant documentation, examples can be found on the Appeals page www.ppcc.edu/appeal

The completed appeal form and supporting documents will be reviewed by the Academic Suspension Appeals Committee which includes a representative from each Instructional Division as well as Student Services. Students will be notified via their student email of the Committee's decision regarding their request for an exception to the academic suspension policy and any conditions that apply to their reinstatement. The Academic Suspension Appeals Committee may uphold the suspension; may grant the appeal without conditions; or may grant the appeal with conditions such as limiting the number of credit hours a student may register for, or requiring a study skills class, etc. The Academic Suspension Appeals Committee's decisions are final and may not be appealed further. There is no guarantee that a student who is granted an appeal will be allowed to re-enroll in the classes from which the student was previously dropped for being on academic suspension.

The last day to file an Academic Suspension Appeal is always the Friday just prior to the last week of registration before each semester.

Academic Concerns

Any student who wishes to pursue an instructional concern or change of grade must exhaust the following options in sequence prior to petitioning the Vice President for Instructional Services. (Examples of instructional or course concerns deal with instructor behavior, class policies, and unfair expectations or demands.)

1. The student must meet with the instructor and attempt to resolve the problem. If no resolution:
2. The student must state the concern in writing and meet with the Department Chair (in the case of an adjunct instructor) or Dean / Associate Dean (in the case of a faculty member). Departments may require specific documentation. Please contact the appropriate division. If no resolution:

3. The student will meet with the Dean.

If the student contests the Dean's decision, he/she must submit the request in writing to the Office of the Assistant to the Vice President for Instructional Services. The request should include documentation of everything that the student wants considered in the decision. The Dean will also submit all written documentation and recommendations. The Vice President for Instructional Services or a designee will notify the student of the decision in writing. This decision will be final.

Credits in Residence

A student must complete 25% of their credits in residence at the College that will confer the degree or certificate. A College may consider an appeal to award a degree or certificate to a student transferring from another CCCS College and who has not completed 25% of their credits in residence. In order to approve the appeal, the College must be able to explain and justify its decision.

Two or more CCCS Colleges may enter into a Memorandum of Understanding (MOU) that would allow students to complete a degree or certificate without satisfying the 25% credits in residence requirement. The MOU must be signed by each participating College, shared with the Vice Chancellor for Academic and Student Affairs, and provided to the Higher Learning Commission.

Term Academic Honors

PPCC provides an opportunity for students to be recognized with Academic Honors, on a term-by-term basis. Students who qualify will receive a notation for that term on their official transcripts.

Term Grade Point Averages required to qualify for these Term Academic Honors, are as follows:

Dean's List:	3.50 – 3.749
Vice President's List:	3.75 – 3.99
President's List:	4.00

SU / PF grades and grades for Developmental Education coursework are not included in the Grade Point Average (GPA) Calculation. Students must complete a minimum of 6 eligible credit hours in the term to be considered for Term Academic Honors.

Awarding of summer term honors is at the discretion of the College.

Graduation Honors

Graduation honors are awarded to students who complete the requirements for a degree and earn a 3.5 or better cumulative GPA at the College. Only college-level courses completed at the College will be included in the GPA calculation. A minimum number of 15 credits taken at PPCC is required to be eligible for graduation honors. The three levels of recognition are defined as follows and will be posted on the student's transcript.

	Cumulative GPA
Cum Laude (with honor)	3.50 to 3.749
Magna Cum Laude (with great honor)	3.75 to 3.99
Summa Cum Laude (with highest honor)	4.00

Application for Certificate or Degree

Prior to applying for graduation, students should meet with an academic advisor in Advising and Testing or their faculty advisor to ensure that they are close to graduating. When students have verified that they are close to graduating, they must file an application for graduation. Once students have applied, their application will undergo an audit to see if they have completed all the necessary coursework. Degrees and certificates will be granted during the semester in which the final requirements are completed. Students need to apply for graduation by the published deadlines. The application for graduation and deadlines can be found at www.pccc.edu/academics/records/graduation/.

Auto-Conferral

Mid-way through the Fall and Spring semesters, the Records Office will research records of students who have attended PPCC in the previous three semesters to identify and automatically award those who are determined to be eligible for a degree or certificate based on courses taken at PPCC. Awards will be posted at the end of the semester.

Graduation Ceremony

Each May, PPCC produces a gala graduation ceremony to honor graduating students. To participate, you must be eligible for graduation and must submit an Application for Graduation online by the deadline. Potential graduates will receive an initial letter of information about graduation from the Student Life Office. Caps, gowns, tassels and instructions on the ceremony are all available through the Bookstore. If you are eligible, join us for this festive celebration of your success! The 2020 ceremony will include eligible participants who graduated Summer 2020, Fall 2020 and anticipated graduates in Spring 2021.

Participation in the graduation ceremony does not imply that a degree has been awarded. All degree requirements must be met before a degree is awarded.

Assessment of Student Learning

Assessment is the ongoing process of establishing measurable learning outcomes, providing students with sufficient opportunities to achieve those outcomes, systematically gathering evidence of student learning, and using the resulting findings to confirm and improve student learning. PPCC's assessment framework reflects the vision of the College as stated in the 2016-2022 Strategic Plan and aligns with regional and programmatic accreditation standards. With the guidance of Assessment Coaches, academic departments regularly assess what students know or are able to do upon completion of individual courses/programs and document how assessment results are used to continuously improve teaching and learning.

Assessment of student learning in Career and Technical Education degree programs focuses on the skills and knowledge that employers consider are most important to workplace success. Those program-level outcomes are generally driven by field competencies and industry standards. In the general education disciplines, assessment of student learning focuses on a number of essential skills also known as general education learning outcomes. In Fall 2016, PPCC voted to adopt the following statewide *gtPATHWAYS* competencies as its general education learning outcomes.

- Civic Engagement - Actions wherein students participate in activities of personal and public concern that are both meaningful to the student and socially beneficial to the community.
- Creative Thinking - Capacity to 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.
- Critical Thinking - Ability to analyze information and ideas from multiple perspectives and articulate an argument or an opinion or a conclusion based on their analysis.
- Diversity & Global Learning - Ability to critically analyze and engage complex, interdependent structures and constructs and their implications for individuals, groups, communities, or cultures.
- Information/Literacy - Skills needed to find, retrieve, analyze, and use information.
- Inquiry & Analysis - Inquiry is the systematic process of exploring issues/objects/works through the collection and analysis of evidence that results in informed conclusions/judgments. Analysis is the process of breaking complex topics or issues into parts to gain a better understanding of them.
- Oral/Presentational Communication - Ability to deliver a well-prepared and purposeful presentation grounded in credible information and organized effectively.
- Problem Solving - Ability to design, evaluate, and implement a strategy to answer a question or achieve a goal.
- Quantitative Literacy - Ability to use quantifiable information and mathematical analysis to make connections and draw conclusions.
- Written Communication - Ability to write and express ideas across a variety of genres and styles.

PPCC's philosophy of general education aligns with the Colorado Community College System (CCCS) State Board Policy on General Education (BP 9-40) which states: "General education is 'general' in several clearly identifiable ways: it is not directly related to a student's formal technical, vocational or professional preparation; it is a part of every student's course of study, regardless of his or her area of emphasis; and it is intended to impart common knowledge, intellectual concepts, and attitudes which every educated person should possess." PPCC values the skills and competencies that its general education curriculum provides to students, preparing them for advanced education, employment, and participation in an increasingly diverse and global society.

More information about PPCC's assessment of student learning framework can be found at www.pgcc.edu/about/assessment/.

Research Activities

PPCC encourages and supports the scholarly endeavors of its students. Pursuit of scholarly work and research often involves the use of human subjects for data collection and analysis. PPCC's Institutional Review Board (IRB) reviews human subjects research proposals to ensure that i) the rights and welfare of human subjects used in research studies are protected, ii) risks have been considered and minimized, iii) the potential for benefit has been identified and maximized, iv) all human subjects only volunteer to participate in research after being provided with legally effective informed consent, and v) any research is conducted in an ethical manner and in compliance with established standards. Students seeking to conduct such research may not solicit subject participation or begin data collection until they have obtained clearance by the PPCC IRB. Forms and operating procedures are available at www.pgcc.edu/institutional-effectiveness/irb.

CCCS reserves the right to change any provision or requirement of this procedure at any time and the change shall become effective immediately.

STUDENT CONDUCT

In This Section

Student Code of Conduct..... 25
 Student Disciplinary Procedure..... 26
 Student Grievance Procedure 29
 Civil Rights and Sexual Misconduct Resolution Process 31
 Academic Honesty..... 34
 Classroom Attendance Procedure..... 34
 Conduct in College Buildings..... 34
 Restricted Attendance 35
 Alcohol and Drug Policies 35
 Smoking on College Grounds 36
 Sexual Harassment..... 36
 AIDS Policy..... 37
 Firearms on Campus..... 37
 Parking and Traffic Regulations 37
 Days of Enforcement 38
 Behavioral Intervention Team (BIT)..... 38
 Emergencies and Crime Reporting 38
 Emergency Notification..... 39
 Reporting Criminal Offenses..... 40
 Rioting Offenses..... 40
 Sex Offender Registration..... 40
 Campus Crime and Security Report..... 40

Student Code of Conduct

In order to support a positive, safe, and productive learning environment for the entire College community, all students are expected to abide by the Pikes Peak Community College Student Code of Conduct. Conduct that violates student rights and freedoms and is subject to disciplinary action includes, but is not limited to:

1. Academic Misconduct

Plagiarizing, cheating, or committing any other form of academic misconduct including, but not limited to, unauthorized collaboration, falsification of information, and/or helping someone else violate reasonable standards for academic behavior. Students who engage in any type of academic dishonesty are subject to both academic consequences as determined by the instructor and to disciplinary action as outlined in the Pikes Peak Community College disciplinary procedures (Colorado Community College System President’s Procedure SP-4-30).

2. Disruptive Behavior

Engaging in any disruptive behavior that negatively affects or impedes teaching or learning (regardless of mode of delivery or class setting); or disrupts the general operation of the college.

3. Deceitful Acts

Engaging in deceitful acts, including, but not limited to: forgery, falsification, alteration, misrepresentation, non-disclosure, or misuse of documents, records, identification and/or educational materials.

4. Conduct that is Detrimental to College or to Safety

Conduct that is deemed detrimental, harmful and/or damaging to the college and/or that jeopardizes the safety of

others as determined by the Pikes Peak Community College Dean of Students. Examples include, but are not limited to, slamming doors, throwing chairs, and/or defacing of college property.

5. Physical/Non-physical Abuse

- Physical abuse or conduct that threatens or endangers another person’s health or safety.
- Non-physical abuse, threats, intimidation, coercion, influence, or any unwelcome conduct in any form that is sufficiently severe, pervasive, or persistent that it alters the conditions of the learning environment or employment.
- Knowingly falsifying, publishing, or distributing, in any form, material that tends to impeach the honesty, integrity, virtue or reputation of another person

6. Harassment and/or Discrimination

Discrimination or harassment on the basis of sex/gender, race, color, age, creed, national or ethnic origin, physical or mental disability, veteran status, pregnancy status, religion or sexual orientation.

7. Sexual Misconduct

Sexual Misconduct offenses include, but are not limited to Sexual Harassment, Non-Consensual Sexual Contact (or attempts to commit same), Non-Consensual Sexual Intercourse (or attempts to commit same), and/or Sexual Exploitation. (See SP 4-120a for more information: www.cccs.edu/sp-4-120a-sexual-misconduct/).

8. Weapons

Possession or distribution of any unauthorized firearms, ammunition, explosives, fireworks and/or other dangerous weapons (or chemicals) or use/threat of use of any instrument as a weapon to intimidate, harass, or cause harm to others.

9. Narcotics/Alcohol

Use, being under the influence, manufacturing, possession, distribution, purchase, or sale of alcohol and/or drugs (illegal and/or dangerous or controlled substance) while on college-owned or college-controlled property, and/or at any function authorized or supervised by the college and/or in state owned or leased vehicles.

Note: Although possession and use of marijuana consistent with the requirements of the Colorado Constitution is no longer a crime in the State of Colorado, the possession and use of marijuana remains illegal under federal law. Consistent with federal law, including the Controlled Substances Act and the Drug Free Schools and Communities Act, the use and/or possession of marijuana continues to be prohibited while a student is on college owned or college controlled property, and/or any function authorized or supervised by the college and/or in state owned or leased vehicles.

10. Dress Code

Dress or personal hygiene that fails to meet the established safety or health standards of specific classes or activities offered by the college.

11. Leaving Children Unattended

Leaving children unattended or unsupervised in campus buildings or on campus grounds unless enrolled or participating in authorized campus activities.

12. Violation of Laws, Directives, and Signage

- Violating any municipal, county, state or federal law that adversely impacts the conditions of the educational or employment environment.
- Violations of college traffic and parking rules, regulations, or signage.
- Creating an intentional obstruction that unreasonably interferes with freedom of movement, either pedestrian or vehicular. This includes but is not limited to leading or inciting to disrupt college activities. Failure to comply with the lawful directives of College employees acting within the scope of their duties, including those directives issued by a College administrator to ensure the safety and well-being of others.
- Violations of college policies, protocols, or procedures.

13. Illegal Gambling

Participation in illegal gambling activities on college owned or college-controlled property, and/or any function authorized or supervised by the college and/or in state owned or leased vehicles.

14. Unauthorized Entry and/or Unauthorized Possession

Entry into or use of any building, room, or other college-owned or college-controlled property, grounds, or activities without authorized approval. This also includes, but is not limited to the unauthorized possession, duplication or use of college keys, lock combinations, access codes, and access cards and/or credentials.

15. Unacceptable Use of College Equipment, Network or System

Unacceptable uses of any college-owned or operated equipment, network or system including, but not limited to: knowingly spreading computer viruses; reposting personal communications without author's consent; copying protected materials; using the network for financial or personal gain, commercial activity, or illegal activity; accessing the network using another individual's account; unauthorized downloading/uploading software and/or digital video or music; downloading/uploading, viewing or displaying pornographic content, or any other attempt to compromise network integrity.

16. Unauthorized Pets/Animals

Possession of any unauthorized pet or animal, excluding trained service animals while on college-owned or college-controlled property.

17. Tampering with Student Organization, Election, or Vote

Tampering with the process of any college recognized student organization, election, or vote.

18. Group or Organization Conduct

Students who are members of a college recognized student organization or group and commit a violation of SCOC may be accountable both as an individual and as a member of the student organization.

19. Abuse of the Student Disciplinary and/or Grievance Procedure

Abuse of the Student Disciplinary and/or Grievance Procedure includes, but is not limited to the following:

- Disruption or interference with the orderly conduct of the student disciplinary/grievance procedure.
- Falsification, distortion, or misrepresentation, or knowingly pursuing malicious, frivolous, or fraudulent charges.
- Attempting to discourage an individual's proper participation in, or use of, the student disciplinary/grievance procedure.
- Attempting to influence the impartiality of a participant and/or the student disciplinary/grievance procedure.
- Harassment (verbal or physical) and/or intimidation of a participant in the student disciplinary/grievance procedure.
- Failure to comply with directives and/or sanctions imposed under student disciplinary/grievance procedure.
- Influencing or attempting to influence another person to commit an abuse of the student disciplinary/grievance procedure.
- Engaging in retaliatory acts in any form against any person or person(s) involved in the student disciplinary/grievance procedure

20. Official college communication will be sent to your college email.

Please note: In most circumstances, Pikes Peak Community College will treat attempts to commit code of conduct violations as if those attempts have been completed.

At Pikes Peak Community College, administration of the disciplinary and grievance procedures is the responsibility of the Dean of Students.

Student Disciplinary Procedure

Reference

Board Policy (BP) 4-30; System President's Procedure (SP) 4-31a

Application

The procedure applies to students within the Colorado Community College System (CCCS).

Basis

Students are expected to adhere to the Student Code of Conduct and policies and procedures of the College. If a student is charged with violating her/his College's Code, these are the procedures to be used in resolving the charge.

Definitions

Chief Student Services Officer (CSSO): The individual designated by the College President to administer student affairs and be responsible for administering the College's Student Code of Conduct and this procedure. The CSSO may delegate student discipline to another individual (designee).

Code of Conduct: A document developed and published by each College which defines prescribed conduct of students.

Complainant(s): A person(s) who is subject to the alleged misconduct or related retaliation. For purposes of this procedure, a complainant can be a CCCS employee(s), student(s), authorized volunteer(s), guest(s), or visitor(s).

Day: Refers to working day unless otherwise noted below.

Jurisdiction: Applies to behaviors that take place on the campus, at System or College sponsored events; and may also apply off-campus and to online activity when the Chief Student Services Officer (CSSO), or designee, determines that the off-campus conduct affects a substantial System or College interest. A substantial College interest is defined to include the following:

- Any action that constitutes criminal offense as defined by federal or Colorado law. This includes, but is not limited to, single or repeat violations of any local, state or federal law committed in the municipality where the System or the College is located;
- Any situation where it appears that the accused individual may present a danger or threat to the health or safety of self or others;
- Any situation that significantly impinges upon the rights, property or achievements of self or others or significantly breaches the peace and/or causes social disorder; and/or
- Any situation that is detrimental to the educational interests of the System or the College.

Any online postings or other electronic communication by students, including cyber-bullying, cyber-stalking, cyber-harassment, etc. occurring completely outside of the System or the College's control (e.g., not on System or College networks, websites or between System or College email accounts) will only be subject to this procedure when those online behaviors can be shown to cause a substantial on-campus disruption. Otherwise, such communications are considered speech protected by the First Amendment to the Constitution.

Notice: Notices which are required to be given by this procedure shall be considered served upon the student when given by personal delivery, mailing by certified mail, or emailing the student to their official College email address requesting a delivery receipt notification. If notice is mailed, student shall be given three (3) additional days to respond.

Respondent: A student whose alleged conduct is the subject of a complaint or incident.

Retaliatory Acts: Include but not limited to intimidation, verbal or physical threats, harassment, coercion, or other adverse action(s) against a person who reports an incident of misconduct.

Sanctions: One or more of the following may be imposed when there is a finding that a student has violated the College's Code of Conduct.

1. Warning: A Notice served upon the student advising him/her that he/she is violating or has violated College regulations.
2. Probation: After a finding of violation of the Code of Conduct, restriction of student's privileges for a designated period of time including the probability of more severe disciplinary sanctions if the student is found to be violating any College regulations during the probationary period.
3. Other Disciplinary Sanction: Fines, restitution, denial of privileges (including extra-curricular activities or holding office in student organizations), assignment to perform services for the benefit of the College or community; educational sanctions such as mediation, letter of reflection, attendance at a workshop, seminar, or training writing a letter of apology seeking academic advising; re-assignment or eviction from

campus housing, substance abuse screening, re-assignment to another class section, including a potential online section, or other sanction that doesn't result in the student being denied the right of attending classes, or any combination of these.

4. College Suspension or Expulsion: An involuntary separation of the student from the College for misconduct not based on academic performance for a specified period of time.

a. Suspension is a separation that shall not exceed three academic terms (including summer term) per suspension for any singular offense or situation. While a student is suspended, he or she is not eligible for admission or re-admission at any of the community Colleges within the System.

Additionally, if a student is suspended at any of the other Auraria Campus Institutions (i.e., Metropolitan State University of Denver [MSUD] or the University of Colorado Denver [UCD]), he or she will not be eligible for admission or re-admission at the Community College of Denver (CCD).

Consequently, if a student is suspended at MSUD or UCD and attempts to enroll at one of the other twelve community Colleges within the System, he or she may be denied pursuant to the process under Board Policy 4-10, Admission, Continued Enrollment and Re-enrollment of Students.

Once the suspension is lifted at any of the community Colleges within the System, MSUD or UCD, the student may be eligible for admission or re-admission.

Examples of suspension include but are not limited to the following: the College, a department or program, a class, use of a College facility or an activity.

Students may be suspended from one class period by the responsible faculty member or adjunct instructor. Longer suspensions can only be implemented by the CSSO or designee in accordance with this procedure.

- b. Expulsion is an indefinite separation from the College. The expelled student is not eligible for admission or re-admission at any of the community Colleges within the System.

Additionally, if a student is expelled at MSUD or UCD, he or she will not be eligible for admission or re-admission at CCD.

Consequently, if a student is expelled at MSUD or UCD and attempts to enroll at one of the other twelve community Colleges within the System, he or she may be denied pursuant to the process under Board Policy 4-10, Admission, Continued Enrollment and Re-enrollment of Students.

In exceptional cases where a student wants to be considered for admission or re-admission after an expulsion has been implemented, the student bears the burden to prove the behavior resulting in the expulsion has been resolved. It is the College's discretion to admit or deny the student.

5. Interim Action: An immediate action taken by the CSSO or designee, to ensure the safety and well-being of members of the System or College community; preservation of System or College property; or if the student poses a definite threat of disruption or interference to others or the normal operations of

the System or College. In the event of an interim action, the hearing before the CSSO or designee shall occur as soon as possible following the interim action. If the College issues a permanent sanction, the student shall be afforded appeal rights as discussed below. If the College does not implement a permanent sanction, the interim action will be removed from the student's record.

6. The College may issue a "Cease Communications", "No Contact", and/or "No Trespass" directive, also referred to as a *persona non grata*.

Student: All persons currently taking courses at or sponsored by the College(s), pursuing either credit and non-credit courses (or both), including those concurrently attending secondary or post-secondary institutions and College. Persons who are not officially enrolled for a specific term, but who have a continuing relationship with the College are considered students.

Continuing Relationship: A student registered for an upcoming term or has indicated intent via a transaction such as a financial aid application to register for an upcoming term. A continuing relationship also includes students who are first time enrollees who engage in misconduct prior to the time of enrollment. For students in a continuing relationship status, jurisdiction and the reasonable person standard must be considered in pursuing disciplinary charges. The Student Conduct Code shall apply to a student's conduct even if the student withdraws from school while a disciplinary matter is pending.

Title IX Coordinator(s) and Title VI and VII Coordinator(s) (EO Coordinator): Designated by the College President to oversee all civil rights complaints.

Training: All College officials involved with the investigation and discipline process will be trained annually on the issues related to domestic violence, dating violence, sexual assault, and stalking.

Procedures

The CSSO or designee shall receive all allegations of student misconduct, investigate the complaints, which includes meeting with the student to give him/her the opportunity to respond to the allegations of misconduct. If the allegations of misconduct are discrimination and/or harassment based on federal or state civil rights laws, the College will investigate those incidents through the Civil Rights Grievance and Investigation Process, System President's Procedures (SP) 3-50b and (SP) 4-31a via the following link: www.ccs.edu/about-cccs/state-board/policies-procedures/.

Once the investigation is complete, either through this process or the Civil Rights Grievance and Investigation Process, the CSSO or designee shall render a sanction decision.

The CSSO or designee may decide that the charges can be disposed of administratively by mutual consent of the parties involved on a basis acceptable to them. If an administrative resolution is not achieved, the CSSO or designee shall issue a decision which determines whether the alleged conduct occurred; whether the conduct violated the Code of Conduct or College procedures; and impose a sanction(s) if appropriate.

In cases of domestic violence, dating violence, sexual assault and stalking, the complainant and the respondent will be notified simultaneously in writing of the outcome of any disciplinary proceeding, as well as any changes to those results or disciplinary actions prior to the time that such results become final and shall be given the rationale for the discipline decision.

The student shall receive written notice of the decision and be advised of her/his right to appeal the decision, subject to the grounds below, by filing a written appeal with the CSSO or designee within seven (7) days of service of the decision.

Appeal

In the event of an appeal, the CSSO or designee shall give written notice to the other party (e.g., if the accused student appeals, the appeal is shared with the complainant who may also wish to file a response), and then the CSSO or designee will draft a response memorandum (also shared with all parties). All appeals and responses are then forwarded to the Appeals Officer or committee for initial review to determine if the appeal meets the limited grounds and is timely. The original finding(s) and sanction(s) will stand if the appeal is not timely or substantively eligible, and the decision is final.

If the appeal has standing, the documentation is reviewed. Because the original finding(s) and sanction(s) are presumed to have been decided reasonably and appropriately, the party appealing the decision must specifically cite the error(s) in the original determination on which the appeal is based. The only grounds for appeal are as follows:

1. A material procedural or substantive error occurred that significantly impacted the outcome of the hearing (e.g. substantiated bias, material deviation from established procedures); which must be explained in the written appeal; or
2. To consider new evidence, unavailable during the investigation or hearing that could substantially impact the original finding or sanction. A summary of this new evidence and its potential impact must be included in the written appeal, as well as the reasons the new evidence was not available during the original proceeding. Failure to participate in the initial process does not constitute as new information for the appeal process.

If the Appeals Officer or committee determines that a material procedural or substantive error occurred, it may return the complaint to the CSSO or designee with instructions to reconvene, in order to cure the error. In rare cases of bias, where the procedural or substantive error cannot be cured by the CSSO or designee, the Appeals Officer or committee may order that a new hearing be held by a different individual acting in the place of the designated CSSO or designee. The results of a reconvened hearing cannot be appealed. The results of a new hearing can be appealed once on (either or both of) the two applicable grounds for appeals.

If the Appeals Officer or committee determines that new evidence should be considered, it will return the complaint to the CSSO or designee to reconsider in light of the new evidence, only. If the subject matter pertains to civil rights violations pursuant to SP 4-31a, the Appeals Officer or committee will return the complaint to the Title IX/EO Coordinator to reconsider in light of the new evidence, only. The reconsideration of the CSSO, designee, or Title IX/EO Coordinator is not appealable.

The procedures governing the hearing of appeals include the following:

- All parties should be timely informed of the status of requests for appeal, the status of the appeal consideration, and the results of the appeal decision.
- If the Appeals Officer or committee determines there is new evidence or error in the original proceeding, every opportunity to return the appeal to the CSSO or designee for reconsideration (remand) should be pursued.

- Appeals are not intended to be a full rehearing of the complaint (de novo). In most cases, appeals are confined to a review of the written documentation or record of the original hearing, and pertinent documentation regarding the grounds for appeal.
- An appeal is not an opportunity for an Appeals Officer or committee to substitute their judgment for that of the CSSO or designee, merely because they disagree with her/his finding and/or sanctions.
- Appeals decisions are to be deferential to the original decision, making changes to the findings only where there is clear error and a compelling justification to do so.
- Sanctions imposed are implemented immediately unless the CSSO or designee stays their implementation in extraordinary circumstances, pending the outcome of the appeal.
- The Appeals Officer or committee will render a written decision on the appeal to all parties within seven (7) days of receiving the appeal request. The committee's decision to deny appeal requests is final.

Additional Process Provisions

- The student may have the opportunity to be advised by a personal advisor of their choice, at their expense, at any stage of the process and to be accompanied by that advisor at any meeting or hearing. An advisor may only consult and advise her/his advisee, but not speak for the advisee at any meeting or hearing. These procedures are entirely administrative in nature and are not considered legal proceedings. The CSSO may remove or dismiss an advisor who becomes disruptive or who does not abide by the restrictions on their participation.
- The student is responsible for presenting his/her own case and, therefore, advisors are not permitted to speak or to participate directly in any hearing, except when the student is under the age of eighteen (18) or incapacitated.
- Student shall have the right to identify documents, witnesses, and other material he/she would like the CSSO or designee to review before making a final decision.
- Any hearing held shall be conducted in private unless all parties agree otherwise.
- A record of the hearing should be maintained by the CSSO or designee.
- Audio and/or Video Recording - the College, at its discretion, may audio or video record any meeting throughout the process. Should a recording exist, the student may request a copy at the end of the process. No other audio or video recording will be allowed.
- If student has a disability and would like to request an accommodation to assist him/her through the discipline process they may do so by informing the CSSO or designee. The CSSO or designee will then work with disability support services to accommodate the request.
- Proceedings under this procedure may be carried out prior to, simultaneously with, or following civil or criminal proceedings off-campus.
- Standard of proof - the College will use the preponderance of evidence standard in the disciplinary proceedings, meaning, the College will determine whether it is more likely than not a conduct code was violated.

- All sanctions imposed by the original decision maker will be in effect during the appeal. A request may be made to the CSSO or designee for special consideration in exigent circumstances, but the presumptive stance of the College is that the sanctions will stand. Graduation, study abroad, internships/externships, clinical placements, extra-curricular activities, etc. do not (in and of themselves) constitute exigent circumstances, and students may not be able to participate in those activities during their appeal. In cases where the appeal results in reinstatement to the College or of privileges, all reasonable attempts will be made to restore the student to their prior status, recognizing that some opportunities lost may be irretrievable in the short term.
- The procedural rights afforded to students above may be waived by the student.
- All timelines may be extended as agreed upon by both parties.

Retaliatory Acts

It is a violation of this procedure to engage in retaliatory acts against any employee or student who reports an incident(s) of Code of Conduct violations or any employee or student who testifies, assists or participates in the discipline proceeding, investigation or hearing relating to such allegation(s) of Code of Conduct violations.

Revising this Procedure

CCCS reserves the right to change any provision or requirement of this procedure at any time and the change shall become effective immediately.

Student Grievance Procedure

Reference

Board Policy 4-31; SP 4-31a

Application

The procedure applies to students within the Colorado Community College System (CCCS).

Basis

This Student Grievance Procedure is intended to allow students an opportunity to present an issue which they feel warrants action, including the right to secure educational benefits and services.

If the basis of the claim is discrimination and/ or harassment based on federal or state civil rights laws, the student must file a grievance under the Civil Rights Grievance and Investigation Process. If the accused (respondent) is a student, please refer to SP 4-31a. If the respondent is a CCCS employee, please refer to SP 3-50a.

Definitions

Complainant(s) is a person who is subject to alleged inequity as it applies to Board Policies, System President's Procedures, or College Procedures. For purposes of this procedure, a complainant is student who was enrolled at the time of the alleged incident.

Respondent(s) is a person whose alleged conduct is the subject of a complaint. For purposes of this procedure, a respondent can be a CCCS employee(s), student(s) who was enrolled at the time of

the alleged incident, authorized volunteer(s), guest(s), visitor(s), or college.

Grievance: A grievable offense is any alleged action which violates or inequitably applies State Board Policies, System President's Procedures, and College Procedures. The complainant must be personally affected by such violation or inequitable action.

Non-grievable matters: The following matters are not grievable under this procedure except as noted: matters over which the college is without authority to act; grades and other academic decisions unless there is an allegation that the decision was motivated by discrimination and/or harassment which should be filed under the appropriate Civil Rights Grievance and Investigation Process.

Chief Student Services Officer (CSSO): The college employee designated by the college president to administer student grievances. The CSSO may delegate the responsibility over student grievances to another person.

Notice: Notices which are required to be given by this procedure shall be considered served upon the student when given by personal delivery, mailing by certified mail, or email with receipt notification to the address the student has filed with the College's admissions and records office. If notice is mailed, student shall be given three (3) additional days to respond.

Day: Refers to calendar day unless otherwise noted below.

Remedy: The relief that the Grievant is requesting.

Filing a Complaint

All complaints shall be made as promptly as possible after the occurrence. A delay in reporting may be reasonable under some circumstances; however, an unreasonable delay in reporting is an appropriate consideration in evaluating the merits of a complaint or report.

Procedures

Students must timely submit all grievances in writing (See Appendix) to the CSSO. The grievance should clearly and concisely describe the alleged incident(s), when and where it occurred, and the desired remedy sought. The grievance should be signed by the initiator or, in the case of an email submission, sent as an email attachment, in letter format and should contain the name and all contact information for the grievant. Any supporting documentation and evidence should be referenced within the body of the formal grievance. Additionally, the initiator of a formal grievance should submit any supporting materials in writing as quickly as is practicable.

The complainant's supporting documentation should clearly demonstrate all informal efforts, if any, to resolve the issue(s) with the person involved and the person's supervisor. This includes names, dates and times of attempted or actual contact along with a description of the discussion and the manner of communication made in the course of each effort. If contacting the person involved and/or the supervisor is impracticable, the complainant should state the reasons why.

The CCCS community benefits from informal and formal procedures that encourage prompt resolution of complaints and concerns students may have about the implementation of policies and procedures that govern the institution.

Informal Grievance Process

Complainant is encouraged to resolve the issue with the Respondent through the informal process. The CSSO shall facilitate the informal process. If the informal grievance process is unsuccessful, or if CCCS or the complainant chooses not to pursue the informal process, the CSSO will open a formal grievance case.

Formal Grievance Process

Complainant must timely file a written statement of the actions complained of and describes the remedy s/he is seeking with the CSSO. A matter could also be referred to this process by the College president or his/her designee. Once a written grievance is filed or referred, the CSSO or designee will determine whether or not the situation states a grievable offense. The matter will be closed if the situation is determined not grievable and the Complainant will be notified of the reasons.

If the matter is determined to be grievable, the CSSO will request a meeting (hearing) with both the complainant and respondent. Both parties will be given the opportunity to discuss the allegations of the grievance and may offer any documentation, witnesses, or other materials in support of the complaint. During this hearing, neither party may have a representative, including attorneys or law students. These procedures are entirely administrative in nature and are not considered legal proceedings.

No audio or video recording of any kind other than as required by institutional procedure is permitted.

The CSSO may also contact or request a meeting with relevant college staff, students, or others as part of the investigation.

At the CSSO's discretion, the CSSO may discontinue meetings with anyone that is causing a disruption to the process or is being uncooperative and will proceed to make a determination based on the information known at that time.

Based on the preponderance of evidence, the CSSO shall issue a decision, in writing, to both the complainant and respondent. The decision shall reject or grant the grievance and make recommendation(s) to resolve the issue(s). The complainant and respondent shall be advised of his/her right to appeal the decision, subject to the grounds below, by filing a written appeal with the CSSO within seven (7) days of service of the Decision.

In the event of an appeal, the CSSO shall give written notice to the other party to allow him/her the opportunity to submit a response in writing. The CSSO will also draft a response memorandum (also shared with all parties). All appeals and responses are then forwarded to the appeals officer or committee for initial review to determine if the appeal meets the limited grounds and is timely. The original finding will stand if the appeal is not timely or substantively eligible, and the decision is final. If the appeal has standing, the documentation is forwarded for consideration. The party requesting appeal must show error as the original finding is presumed to have been decided reasonably and appropriately. The ONLY grounds for appeal are as follows:

1. A procedural or substantive error occurred that significantly impacted the outcome of the hearing (e.g. substantiated bias, material deviation from established procedures); or
2. To consider new evidence, unavailable during the original hearing or investigation, that could substantially impact the original finding. A summary of this new evidence and its potential impact must be included in the written appeal.

If the appeals officer or committee determines that new evidence should be considered, it will return the complaint to the CSSO to reconsider in light of the new evidence, only.

If the appeals officer or committee determines that a material procedural or substantive error occurred, it may return the complaint to the CSSO with instructions to reconvene the hearing to cure the error. In rare cases, where the procedural or substantive error cannot be cured by the CSSO in cases of bias, the appeals officer or committee may order a new hearing be held by a different individual acting in the place of the designated CSSO. The results of a reconvened hearing cannot be appealed. The results of a new hearing can be appealed, once, on the two applicable grounds for appeals.

Special Grievance Process Provisions

- In the event that the student is under the age of eighteen or incapacitated, s/he may have an advisor present to assist him/her in presenting his/her case.
- Students do not have the right to be represented by an attorney or law student during these proceedings except in the case where civil or criminal actions concerning the student are pending and in that case the attorney's role shall be advisory only.
- The student is responsible for presenting his/her own case and, therefore, advisors are not permitted to speak or to participate directly in any hearing except when the student is under the age of eighteen or incapacitated.
- Student shall have the right to identify documents, witnesses, and other material he/she would like the CSSO to review before making a final decision.
- Any hearing held shall be conducted in private unless all parties agree otherwise.
- A record of the hearing should be maintained by the CSSO.
- If student has a disability and would like to request an accommodation to assist him/her through the grievance process they may do so by informing the CSSO. The CSSO will then work with disability support services to accommodate the request.
- If the grievance is against the CSSO, the Chief Academic Officer or other person designated by the president shall perform the duties of the CSSO.
- Jurisdiction-College grievance proceedings may be instituted over incidences that occur or are related to College or college-sanctioned activities or was of such a nature to impact upon the college.
- Proceedings under this procedure may be carried out prior to, simultaneously with, or following civil or criminal proceedings off-campus.
- Standard of proof-the college will use the preponderance of evidence standard in the grievance proceedings, meaning, the college will determine whether it is more likely than not the complainant was subjected to inequity as it applies to Board Policies, System President's Procedures, or College procedures.
- The procedural rights afforded to students above may be waived by the student.

Retaliatory Acts

It is a violation of the grievance procedure to engage in retaliatory acts against any employee or student who files a grievance or any employee or student who testifies, assists or participates in the grievance proceeding, investigation or hearing relating to such grievance.

Revising this Procedure

CCCS reserves the right to change any provision or requirement of this procedure at any time and the change shall become effective immediately.

For information about the student grievance process, contact the Dean of Students office, 719-502-2367.

Civil Rights and Sexual Misconduct Resolution Process

Reference

Board Policy (BP) 19-60; System Procedure (SP) 19-60

Application

This procedure applies all students, employees, authorized volunteers, guests, and visitors of the Community Colleges within CCCS. Allegations that an individual has engaged in any discriminatory, harassing, and/or retaliatory behavior, including Sexual Misconduct, after the effective date of this procedure will be resolved under this procedure.

Basis

BP 19-60 provides that individuals affiliated with PPCC shall not discriminate or harass on the basis of sex, gender, race, color, age, creed, national or ethnic origin, ancestry, physical or mental disability, familial status, veteran or military status, pregnancy status, religion, genetic information, gender identity, sexual orientation, or any other protected class or category under applicable local, state or federal law (also known as "civil rights laws"), in connection with employment practices or educational programs and activities (including in admissions). BP 19-60 further provides that individuals affiliated with PPCC shall not retaliate against any person who opposes discrimination, harassment, or retaliation, or participates in any complaint or investigation process.

Filing a Complaint

Any person who believes they have been subjected to a civil rights violation should follow this procedure to report their concerns. PPCC will act on any complaint brought to the attention of the Title IX/EO Coordinator that is made under this procedure.

Preliminary Steps and Timeline

Upon receipt of a complaint, the Title IX/EO Coordinator will review the complaint to determine whether the complaint alleges sufficient information to support that a civil rights violation has occurred (reasonable cause). If the Title IX/EO Coordinator is unable to make this determination in reviewing the complaint alone, the Title IX/EO Coordinator may, at their discretion, reach out to the Complainant or others, as relevant, for clarification and/or additional information.

If no reasonable cause is found to initiate a formal investigation, the Title IX/EO Coordinator shall inform the Complainant of this decision and discuss other options for addressing the reported concerns.

If there is reasonable cause and the Complainant wishes to proceed, the Title IX/EO Coordinator will initiate an informal resolution or a formal investigation. If the Complainant does not wish to proceed, the Title IX/EO Coordinator will give consideration to the Complainant's preference, but reserves the right, when necessary to protect the PPCC community, to initiate an informal resolution or formal investigation of the complaint. The Title IX/EO

Coordinator also reserves the right to initiate an investigation and resolve a complaint without a participating or identifiable Complainant.

Interim Actions

The Title IX/EO Coordinator may implement interim actions, including Supportive Measures, intended to protect the safety and security of the campus community, address the effects of the reported behavior, and prevent further violations, while the complaint is under review or investigation.

These remedies may include, but are not limited to

- placing an employee on administrative leave;
- interim actions outlined in the SP 4-30 Student Disciplinary Procedure;
- campus bans/emergency removals;
- referral to counseling and health services or to the Colorado State Employee Assistance Program (CSEAP);
- education to the community;
- altering work arrangements;
- providing campus escorts;
- implementing contact limitations between the parties (e.g., no contact orders);
- offering adjustments to academic deadlines or course schedules; and/or
- suspending privileges such as attendance at College activities or participation in College-sponsored organizations.

Any campus ban/emergency removal will be implemented only after a determination that the person poses an immediate threat to the physical health or safety of another.

Following the completion of the investigation or resolution process, interim actions may be continued or made permanent as deemed necessary.

Rights of Involved Parties

Throughout the civil rights and sexual misconduct resolution process, Complainants and Respondents shall be entitled to the following:

- To be treated with respect by CCCS employees.
- To take advantage of Supportive Measures and other resources, such as counseling, psychological services, and health services.
- To experience a safe living, educational, and work environment.
- To have an advisor of their choice present at any meeting.
- To have access to a Title IX/EO Coordinator, investigator(s), hearing officers/decision-maker(s) for Title IX cases, and/or other individuals assisting with the resolution process who do not have a conflict of interest or bias for or against either party.
- To receive amnesty for minor student misconduct (such as alcohol or drug violations) that is ancillary to the incident.
- To be free from retaliation.
- To be informed of the outcome/resolution of the complaint, and the sanctions and rationale for the outcome where permissible.
- To have assistance in contacting law enforcement, if desired.
- To request housing, employment, and/or educational modifications, as deemed appropriate and reasonable.
- To request no further contact with the opposite party, as deemed appropriate, allowable, and reasonable.

Informal Resolution

The Title IX/EO Coordinator, in consultation with the parties, may determine that an informal resolution is appropriate to resolve the reported concerns. The primary focus during an informal resolution remains the welfare of the parties and the safety of the PPCC community, but it does not involve a written investigation report or an opportunity to appeal. An informal resolution may include but is not limited to:

- The provision of interim or long-term remedial measures;
- Referral to other resolution processes;
- Training or educational programming for the parties;
- The Title IX/EO Coordinator or a designee serving as a facilitator to discuss the reported concerns with the Complainant and Respondent (either separately or together) and to identify possible resolutions and/or appropriate future conduct; and/or
- Referral to a Disciplinary Authority to further address the reported behavior, as deemed appropriate.
- Notice of the allegations and specific Informal Resolution process will be provided to both parties.
- At any time during the informal resolution process, the Title IX/EO Coordinator may elect to initiate a formal investigation as deemed appropriate to resolve the matter. The parties can elect to cease the informal resolution process at any time before it concludes and proceed with a formal investigation. The informal resolution process is not available in Sexual Harassment cases involving a student Complainant and an employee Respondent.

Formal Investigation

If a formal investigation is initiated, the Title IX/EO Coordinator shall provide written notice (Notice of Investigation) to the Complainant and Respondent notifying them of the investigation and will assign one or more impartial investigators to conduct an investigation into the complaint. The investigation will include an objective evaluation of all relevant evidence, both inculpatory (incriminating or tending to show responsibility for a violation) and exculpatory (exonerating or tending to negate responsibility for a violation).

Preliminary Investigation Report

Following the fact gathering stage of the formal investigation, the investigator(s) shall issue a Preliminary Investigation Report to the Complainant and Respondent (and their advisors, if applicable) for review. The Preliminary Investigation Report will include relevant facts as gathered by the investigators. At this stage, parties may review upon request all evidence collected as part of the investigation, whether or not it will be relied upon in reaching a determination. The Complainant and the Respondent will have ten (10) calendar days to review and respond to the Preliminary Investigation Report with any changes, clarifications, or questions.

Final Investigation Report

At the conclusion of the fact gathering stage and formal investigation, including any relevant information submitted in response to the Preliminary Investigation Report, the investigator(s) shall issue a Final Investigation Report to the Title IX/EO Coordinator detailing the factual findings and summarizing the relevant evidence.

Upon receipt of the Final Investigation Report, the Title IX/EO Coordinator shall proceed as follows:

For cases involving Sexual Harassment within the United States, the Title IX/EO Coordinator shall initiate a live hearing as described in SP 19-60. If a live hearing cannot be held due to refusal of parties to participate, PPCC reserves the right to address the conduct through the procedures applicable to non-Sexual Harassment/Title IX cases.

Following the hearing, the Hearing Officer will issue a Determination Report to the Title IX/EO Coordinator as to whether or not, based on a preponderance of the evidence, the alleged behavior took place and whether that behavior constitutes a civil rights violation. In reaching this determination, the Hearing Officer must consider all relevant evidence, except for any privileged information (unless waived) or medical records (unless specific, written consent is obtained). If a party or witness does not submit to cross-examination during the live hearing, the Hearing Officer cannot rely on any of their statements in their determination, and may not draw any inferences based solely on a party or witness failing to submit to cross-examination. The Determination Report shall include a summary of the allegations; a summary of the procedural steps in the case; findings of fact supporting the determination, conclusions regarding violation of applicable policies with supporting rationale; any disciplinary steps or remedial measures imposed; and the parties' appeal rights.

For other civil rights cases (non-Sexual Harassment or Sexual Harassment outside the United States), the Title IX/EO Coordinator will obtain a written Determination Report from the investigators as to whether or not, based on a preponderance of the evidence, the alleged behavior took place and whether that behavior constitutes a civil rights violation. The determination shall include a summary of all evidence and information used to reach these conclusions.

Notice of Findings

Once a Determination Report is received (either from the investigator(s) or the Hearing Officer following a live hearing), the Title IX/EO Coordinator shall provide written notice (Notice of Findings) simultaneously to the Complainant and Respondent (and their advisors, if applicable) notifying them of the findings. The Complainant and Respondent shall be advised of their right to appeal, subject to the grounds below, by filing a written appeal with the Title IX/EO Coordinator within ten (10) calendar days of service of the decision.

Appeals for Formal Investigations

In the event of an appeal, the Title IX/EO Coordinator shall perform an initial review to determine if the appeal meets the limited grounds listed below and is timely (filed within ten [10] calendar days, as noted above). If the appeal is found to meet these criteria, the Title IX/EO Coordinator shall forward the appeal to a designated appellate officer, who shall give written notice to the opposing party and provide a suitable time frame for the opposing party to submit a written response to the appeal. The appeal and any responses shall be reviewed by the appellate officer. The party requesting an appeal must show error, as the original finding is presumed to have been decided reasonably and appropriately. The only grounds for appeal are as follows:

A procedural error occurred that significantly impacted the outcome of the decision (e.g., substantiated bias, conflict of interest, or material deviation from established procedures). The written appeal shall specify the procedural error and how it impacted the outcome of the decision.

The findings are not supported by substantial evidence in the investigation report or the report does not articulate a rational connection between the facts found and the decision made. The written appeal shall specify the finding(s) not supported by substantial evidence or for which the report does not articulate a rational connection between the facts found and the decision made; or

To consider new evidence, unavailable during the original investigation, that could substantially impact the original finding(s). Any new evidence and its impact must be included in the written appeal.

If the appellate officer determines a procedural error occurred that significantly impacted the outcome of the decision, the appellate officer shall return the complaint to the Title IX/EO Coordinator with instructions to convene a new investigation or the appellate officer shall otherwise cure the procedural error.

If the appellate officer determines the findings were not supported by substantial evidence in the investigation report, the report does not articulate a rational connection between the facts found and the decision made, or new evidence substantially impacts the original finding(s), the appellate officer shall conduct or request appropriate additional steps (such as requesting additional investigation by the investigators) and/or modify the findings accordingly.

Written notice of the outcome of the appeal shall be provided simultaneously to the parties.

Sanctions

Once the appeal process has been exhausted, if the Respondent is found not in violation of policies or procedures outlined herein, the complaint shall be closed with no further disciplinary action. If additional concerns, outside the scope of this procedure, are identified during the course of the investigation, the findings may be shared with appropriate administrative personnel to further address, as deemed appropriate.

If the Respondent is found in violation of policies or procedures outlined herein, the findings shall be provided to the Disciplinary Authority to proceed in accordance with applicable policies:

For classified employees, disciplinary action will be taken pursuant to the applicable State Personnel Rules and Regulations: <https://www.colorado.gov/spb>

For students, disciplinary action will be taken pursuant to BP and SP 4-30, Student Discipline: <https://www.cccs.edu/wp-content/uploads/2013/09/SP4-30.pdf>

Instructors and Administrative, Professional-Technical (APT) employees are at-will under BP 3-10, and may not be subject to additional procedures when issuing sanctions: <https://www.cccs.edu/policies-and-procedures/board-policies/bp-3-10-administration-of-personnel/>.

Disciplinary Authorities may consider a number of factors when determining a sanction. These factors may include, but are not limited to, the following:

- The nature, severity of, and circumstances surrounding the violation;
- An individual's disciplinary history;
- Previous complaints or allegations involving similar conduct; and/or
- Any other information deemed relevant by the Disciplinary Authority.

The following sanctions may be imposed:

- For students: warning, probation, fines, restitution, denial of privileges, assignment to perform services for the benefit of the PPCC community, re-assignment to another class section (including the option for an on-line section), suspension, expulsion, a “Cease Communications” directive, or a “No Trespass” directive.
- For PPCC employees: warning, corrective action, probation, restitution, denial of privileges, suspension, demotion, reduction of pay, termination of employment, a “Cease Communications” directive, or a “No Trespass” directive.
- For authorized volunteers, guests, or visitors: warning, probation, denial of privileges, removal from PPCC property, a “Cease Communications” directive, or a “No Trespass” directive.

In addition to sanctions, other action may be taken as deemed appropriate to bring an end to the In addition to sanctions, other action may be taken as deemed violation, to prevent future recurrence, and to remedy the effects of the violation.

Student Privacy

The outcome of a PPCC investigation is an educational record of a student Respondent, and is subject to privacy protections under the federal Family Educational Rights and Privacy Act (FERPA), however PPCC observes the legal requirements to disclose the records detailed in SP 19-60.

Outside Reporting

In addition to reporting to PPCC, any person has the right to file a police report. Complainants requiring assistance with this should contact the Title IX/EO Coordinator.

Student Complainants also have the right to make inquiries and/or file a complaint with:

Office for Civil Rights (OCR)
U.S. Department of Education
Cesar E. Chavez Memorial Building
1244 Speer Boulevard, Suite 310
Denver, CO 80204-3582
Telephone: (303) 844-5695
Facsimile: (303) 844-4303
Email: OCR.Denver@ed.gov
Web: <http://www.ed.gov/ocr>

Employee Complainants also have the right to make inquiries and/or file a complaint with:

Colorado Department of Regulatory Agencies (DORA)
Colorado Civil Rights Division (CCRD)
1560 Broadway
Suite 825
Denver, CO 80202
Telephone: (303) 894-2997
Facsimile: (303) 894-7570
Email: dora_CCRD@state.co.us
Web: <https://www.colorado.gov/pacific/dora/civil-rights>

Or

United States Equal Employment Opportunity Commission (EEOC)
303 E. 17th Avenue
Suite 410
Denver, CO 80203
Telephone: (800) 669-4000
Facsimile: (303) 866-1085
Web: <https://www.eeoc.gov/field-office/denver/location>

Academic Honesty

Students are expected to conduct themselves according to the highest standards of honesty in the classroom, shop, or laboratory. Failure to do so is grounds for disciplinary action, including suspension or expulsion from Pikes Peak Community College.

Academic honesty is a fundamental value of higher education. It means that you respect the right of other individuals to express their views and that you do not plagiarize, cheat, falsify, or illegally access College records or academic work. You are expected to read, understand and follow the *Student Code of Conduct*.

Academic dishonesty is defined as the unauthorized use of assistance with intent to deceive a faculty member or another person assigned to evaluate work submitted to meet course and program requirements. Examples of academic dishonesty include but are not limited to the following:

- the submission, in whole or part, of material prepared by another person and represented as one’s own
- plagiarism, which is defined as the act of taking the writings, ideas, etc., of another person and passing them off as one’s own
- the unauthorized use of notes, books, or other materials; the deliberate, unacknowledged reference to the work of another student; or the soliciting of assistance from another person during an examination
- illegitimate possession and/or distribution of test materials or answer keys
- unauthorized alteration, forgery, or falsification of official academic records

Classroom Attendance Procedure

Individuals not enrolled in a class are not permitted to sit in the classroom while the class is in session. Faculty members are encouraged to take attendance and anyone not on the class list will be asked to leave the classroom. The only exception to this procedure is for specially trained interpreters necessary for disabled students.

Conduct in College Buildings

By Colorado Executive Order, smoking tobacco products is not permitted in any College facility. Smoking tobacco products includes the use of cigars, cigarettes and electronic smoking devises (i.e. e-cigarettes).

Eating or drinking is not permitted in classrooms, laboratories, shops, the theatre, and the gymnasium, except when permission is granted by the person immediately responsible for supervision of the affected area.

Animals, except when needed for instruction or by disabled persons, are not allowed in any College building. Animals on the College grounds must be on a leash.

Leaving children unattended or unsupervised in campus buildings or on campus grounds can constitute child abuse or child neglect (as outlined in the Colorado Child Protection Act of 1975). Children are not permitted in classrooms during class meeting times.

The College may require students to pay replacement or repair costs for College equipment lost, broken, or damaged through carelessness, negligence, or misconduct.

Restricted Attendance

Faculty may suspend students from one class period if their conduct is obstructive, disruptive, or unacceptable in an instructional setting. Students may return to class after the faculty member has identified the conditions to allow continued attendance. If students return and these conditions are violated, the appropriate dean will review the circumstances and provide information to the Dean of Students. This information shall state the appropriate administrative action, which may include continued attendance or permanent dismissal from the class as outlined in the Student Disciplinary Procedure.

Alcohol and Drug Policies

General

In compliance with the Drug-Free Schools and Communities Act Amendment of 1989 (Public Law 101-226), students, staff, or faculty shall not engage in the unauthorized or unlawful manufacture, distribution, dispensation, possession, use/abuse of alcohol and/or illicit drugs of any kind or any amount on college property or as part of any college activity. This prohibition applies even if the Colorado Department of Public Health and Environment (CDPHE) has issued a Medical Marijuana Registry identification card to an individual, permitting that individual to possess a limited amount of marijuana for medicinal purposes. Those with medical marijuana cards are not permitted to use medical marijuana on campus. These prohibitions cover any individual's actions which are part of any college activities including those occurring while on college property or in the conduct of college business away from the campus.

Any student, staff, or faculty member who is convicted of the unlawful manufacture, distribution, dispensation, possession, use, or abuse of illicit drugs or alcohol is subject to criminal penalties under local, state, or federal law. These penalties range in severity from a fine of \$100 up to \$8,000,000 and/or life imprisonment. The exact penalty assessed depends upon the nature and the severity of the individual offense.

The college will impose penalties against students who violate the Drug-Free Schools and Communities Act Amendments of 1989 (Public Law 101-226). Violators will be subject to disciplinary action under student disciplinary policies. The sanctions include but are not limited to probation, suspension, or expulsion from the college, termination of employment, and referral to authorities for prosecution, as appropriate.

Compliance with drug and alcohol policies is a condition of employment for all PCC employees. Employees may be subject to corrective and/or disciplinary action as per State Personnel Rules and Regulations, up to and including termination. The Executive Director of Human Resource Services sends a campus-wide E-memo each year to inform staff of the college's policy on alcohol and other drugs.

For further information, contact the Human Resource Services Office or the Campus Life Office at the Centennial Campus.

Laws and Statutes

Federal and state laws govern the use and possession of controlled substances.

PPCC 2015 Annual Security Report 50

Excerpts from Colorado Revised Statute (CRS) 18-18-405:

Except as specifically authorized under Colorado law, it is unlawful for any person knowingly to manufacture, dispense, sell, or distribute, or to possess with intent to manufacture, dispense, sell, or distribute, a controlled substance; or induce, attempt to induce, or conspire with one or more other persons, to manufacture, dispense, sell, distribute, or possess with intent to manufacture, dispense, sell, or distribute, a controlled substance; or possess one or more chemicals or supplies or equipment with intent to manufacture a controlled substance.

Except as is otherwise provided for offenses concerning marijuana and marijuana concentrate in and for offenses involving minors, any person who violates the foregoing prohibition commits a Felony Offense.

All drug possession charges and penalties are classified by Schedule, except for Marijuana possession.

Substance/Drug Charge Potential Sentence for Possession:

- Schedule I or II, 1st offense Class 3 Felony 4-12 years in prison and fines of \$3,000- \$750,000
- Schedule III, 1st offense Class 4 felony 2-6 years in prison and fines of \$2,000- \$500,000
- Schedule IV, 1st offense Class 5 felony 1-3 years in prison and fines of \$1,000- \$100,000
- Schedule V, 1st offense Class 1 misdemeanor 6-18 months in jail and fines of \$500-\$5,000

Alcohol

Pikes Peak Community College does not allow the sale of alcohol on any of its campuses. However, the Substance Abuse Procedure for Employees permits the use of alcohol on campus when approved by the President prior to a function. In that event, if alcohol is served, non-alcoholic beverages must also be made available.

PPCC 2015 Annual Security Report 51

Additionally, all students and faculty traveling as a part of a college course or student group sign waivers that state, in part:

Student: "I further understand that I am expected to adhere to the Standards of Conduct and to all policies and procedures of Pikes Peak Community College. Actions such as, but not limited to, sexual harassment, sexual misconduct, dishonesty, forgery, disorderly conduct, indecent or obscene conduct, gambling, infringement upon the rights of others, possession, distribution or consumption of alcohol or illegal drugs and unauthorized use of prescription drugs are prohibited by the Standards of Conduct."

Faculty/Advisor: "I also recognize that this is a college sponsored program/activity and I agree to abide by all college policies, as well as State and Federal laws on the course/program/activity. This includes omitting the use of alcohol and illicit drugs, and not bringing or using any weapons."

Copies of the complete Student/Participant Waiver Form and the Faculty/Advisor Waiver of Rights, Assumption of Risks, and Release of Liability Agreement are included in Appendix C.

Other Drugs

The sale, manufacture, distribution, use, and/or possession of illegal drugs are prohibited.

Although possession and use of marijuana consistent with the requirements of the Colorado Constitution is no longer a crime in the State of Colorado, the possession and use of marijuana remains illegal under federal law. Consistent with federal law, including the Controlled Substances Act and the Drug Free Schools and Communities Act, the use and/or possession of marijuana continues to be prohibited while a student is on college owned or college controlled property, and/or any function authorized or supervised by the college and/or in state owned or leased vehicles.

This prohibition applies even if the Colorado Department of Public Health and Environment (CDPHE) has issued a Medical Marijuana Registry identification card to an individual, permitting that individual to possess a limited amount of marijuana for medicinal purposes. Those with medical marijuana cards are not permitted to use medical marijuana on campus.

Smoking on College Grounds

Pikes Peak Community College campuses must be open and accessible to the general public in order to fulfill the role and mission of the College. In order to promote a healthy environment for the College community, and to comply with Colorado Governor's Executive Order D0036 90, smoking is prohibited in all PPCC buildings and facilities.

"Smoking," as used in this policy, includes, but is not limited to:

- Smoking tobacco products such as cigars, cigarettes, and pipes;
- Cloves, bidis, kreteks, and other herbal cigarettes;
- Electronic smoking devices (e-cigarettes or vapor cigarettes);
- Marijuana, marijuana products, and hashish; and
- Illegal drugs (e.g. cocaine, heroin, opium, methamphetamine).

Smoking of tobacco products and the use of electronic smoking devices is allowed only in designated smoking areas at the Centennial, Rampart Range, and the Downtown Studio campuses.

High school students (Career Start and CE), regardless of age, who attend the College are prohibited from smoking while on PPCC property.

Military sites will comply with all rules and regulations for those installations.

Smoking marijuana products is prohibited on all PPCC campuses. Although possession and use of marijuana consistent with the requirements of the Colorado Constitution is no longer a crime in the State of Colorado, the possession and use of marijuana remains illegal under federal law. Consistent with federal law, including the Controlled Substances Act and the Drug Free Schools and Communities Act, the use and/or possession of marijuana continues to be prohibited on college-owned or college-controlled property, and/or any function authorized or supervised by the college and/or in state owned or leased vehicles.

Designated Smoking Areas

Smoking is permitted in designated smoking areas only at Centennial, Rampart Range, and the Downtown Studio Campuses.

Smoking is not permitted in any campus courtyard, at the Centennial Campus bus stop, or while walking to and from parking lots, bus stops, and buildings at all campuses.

Smoking materials must be discarded in designated receptacles.

Violations of College smoking policies may result in a citation and/or fine, as well as student or employee disciplinary action.

Centennial Campus Designated Smoking Areas

- On the service drive, southwest corner
- On the service drive, southeast corner
- At the northwest entrance off of A lot

Rampart Campus Designated Smoking Area

- Northeast corner at the old bus stop

Downtown Studio Campus Designated Smoking Area

- West side near the ramp exit/entrance

Sexual Harassment

Pikes Peak Community College is firmly committed to maintaining a work and learning environment where students, faculty, and staff are treated with dignity and respect. Sexual harassment and acts of discrimination are illegal, often demeaning for the individual student or employee, and can disrupt the College's positive learning and working environment. As such, all members of the College community have a responsibility to be aware of what behaviors constitute sexual harassment, to be responsible for their own actions, and to help create an environment free of sexual harassment.

Pikes Peak Community College defines sexual harassment as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when one or more of the following criteria are met:

- Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or of academic status in a course, program, or activity.
- Submission to or rejection of such conduct by an individual is used as a basis for employment or academic educational decisions affecting such individual.
- Such conduct is sufficiently severe, persistent, or pervasive so as to have the purpose or effect of unreasonably interfering with an individual's work and/or academic educational performance or creating an intimidating, hostile, or offensive work and/or learning environment.

Furthermore, retaliation against any person for filing a complaint, participating in, or cooperating in an investigation is prohibited.

If you believe that you have been sexually harassed or that you have been retaliated against by anyone in your work and/or academic activities at Pikes Peak Community College, you should report this conduct immediately so that an inquiry into your complaint may commence without delay. You may report this conduct to an officer of the College, instructional dean, division/department director, or a Human Resource Services representative. Substantiated complaints may result in disciplinary action up to and including expulsion from the College.

The College has designated the Executive Director of Human Resource Services as its Equal Opportunity Education/Employment Compliance Officer. Inquiries and/or complaints may be referred to the Human Resource Services office by e-mail, hrs@ppcc.edu, or by calling 719-502-2600. The EEO Compliance Officer or designate will investigate all credible

allegations of sexual harassment in a timely manner and in accordance with its official complaint investigation procedure.

Complaints may also be referred to the Office for Civil Rights, U.S. Department of Education, 1244 Speer Boulevard, Cesar E. Chavez Memorial Bldg., Suite 310, Denver, Colorado 80204, 303-844-5695.

AIDS Policy

Current knowledge indicates that individuals with Acquired Immunodeficiency Syndrome (AIDS), AIDS Related Complex (ARC), or a positive test for antibody to the Human T-Lymphotropic Virus Type III (HTLV-III/HIV) do not pose a health risk to others in a non-laboratory academic setting. According to current medical data, the virus is not transmitted by casual contact. Based on this knowledge, individuals sharing common work or study areas, libraries, classrooms, recreational facilities, cafeterias, and theaters do not present a problem or public health threat to the College community. Laboratories and/or programs dealing with body fluids will teach and practice universal precautionary procedures.

Students or employees of Pikes Peak Community College who are or may become infected with the AIDS virus will not be excluded from enrollment or employment or restricted in their access to College services or facilities unless medically-based judgments indicate restriction is necessary for the welfare of the individual or other members of the College community. There will be no mandatory screening of prospective or current students or employees for the AIDS virus; harassment or discrimination against people infected with the AIDS virus will not be tolerated. Further, the strictest principles of confidentiality will be maintained in management of personal medical information, as provided by law.

Currently, there is no cure for AIDS. Prevention of the disease through education is crucial. The College is committed to ongoing awareness efforts through its curriculum, student and staff activities, and community events.

Firearms on Campus

State Board Policy states that no person may have on his or her person any unauthorized firearm, ammunition, explosive device, or illegal weapon on campus or any facility used by a college. Persons authorized to carry firearms and other equipment defined in the policy are:

- those persons conducting and participating in an approved program of instruction in the college's curriculum which requires access to such equipment as an integral part of the instructional program;
- certified peace officers;
- those persons who have been issued a valid permit to carry a concealed handgun in accordance with Colorado's Concealed Carry Act, C.R.S. § 18-12-201, et seq. and who are acting in compliance with the requirements of that Act; and those persons granted permission at the discretion of the college president for specific purposes from time to time.

Concealed Handgun Permit holders exercising their rights pursuant to Item #3 above are responsible for preventing the casual or inadvertent display of their handgun.

It shall not be an offense if the weapon remains inside a locked motor vehicle upon the real estate owned by the State Board for Community Colleges and Occupational Education.

In accordance with Colorado Statute CRS 18-12-214(3), under no circumstances may a person other than a certified peace officer carry a firearm or other equipment defined in Board Policy onto the real property, or into any improvements erected thereon, of a public elementary, middle, junior high, or high school. This provision applies to The Classical Academy (TCA) facility, which is located on PPCC's Rampart Range Campus and owned by School District 20.

In accordance with Colorado Statute CRS 18-12-214(3)(a), a concealed weapon permittee may have a handgun on the real property of the public school so long as the handgun remains in his or her vehicle and, if the permittee is not in the vehicle, the handgun is in a compartment within the vehicle and the vehicle is locked.

Violations of the college firearms policy may result in criminal prosecution. Questions should be directed to the Department of Campus Police.

Parking and Traffic Regulations

The Pikes Peak Community College Centennial Campus and Rampart Range Campus will provide OPEN parking in all general lots, supported by a student fee paid at registration. These include C, D, and E lots at Centennial and lots one through five at Rampart Range. At Centennial Campus only, motorcycles may be parked in the designated marked areas in lots D and E. At Rampart Range Campus, motorcycles may park in the designated area in lot 2.

Those wishing to obtain a "hang tag" must do so by bringing student/staff identification to the Campus Police office at the Centennial and Rampart Range Campuses. Those wishing to obtain a "hang tag" at the Downtown Studio Campus (DTSC) must bring student/staff identification to the Student Life Office at the DTSC. It provides the following benefits:

- Easy notification in case of an emergency involving the vehicle.
- The hang tag is valid for the student's entire career at PPCC.

Speed limits on campus are 25 M.P.H. on perimeter road and Rampart road unless otherwise posted, and they are 10 M.P.H. in the parking lots. Pedestrians always have the right of way. For the safety of all, DO NOT park in service drives, crosswalks, or roadways. Violators may be ticketed.

Enforcement Authority: By Colorado Revised Statutes 23-5-107. Authority of Governing Boards, Parking.

Handicap Parking: Vehicles bearing state issued handicapped placards, state issued handicapped license plates, or state issued temporary handicapped passes may park in the handicapped areas in lots A, the designated all handicap lot, and on South Service Drive at the Centennial Campus and in the handicapped areas in lots one, two and three at the Rampart Range Campus. Only vehicles identified as belonging to handicapped persons displaying the state issued handicapped placards/license plates may park in the handicapped areas.

At the Centennial Campus only: Visitor Parking: A-Lot Visitor Parking for those on short-term business with the College. These visitor parking spots are for the convenience of College visitors and not for use by students, faculty, or staff. Those who park at the one-hour visitor parking spots can receive a ticket if they are parked there for more than one hour. Visitors whose business will take longer than the visitor parking allow should use the parking spaces in C, D, and E lots.

Traffic Violations: The Department of Campus Police (DCP) will issue citations which may include fines and/or vehicle impoundment for both parking and moving violations occurring on College property. Summons and Penalty Assessments must be answered in El Paso County Court. College Citations for parking violations will result in a fine which must be paid to the College cashier in A-101 at Centennial Campus or S-102 at Rampart Range Campus, 8 a.m. to 5 p.m., Monday–Thursday and 8 a.m. to 3 p.m. on Friday.

The registered owner of the vehicle or identified user of the vehicle shall be held liable for all violations.

Appeals: If a person wants to appeal a parking citation, he/she must submit a statement in writing before the tenth working day from the date of the citation. Appeal forms are available in room A-100 at Centennial Campus and N-106 at Rampart Range Campus. The Director of Campus Police reviews the appeals and mails them back to the appropriate person.

Mopeds and Bicycles: Service decals are not required for bicycles or mopeds. Parking for these vehicles is available at the Centennial Campus outside the main entrance to A-building, by A-121, and at Rampart Range Campus outside the main entrance. Bicycles or mopeds locked or parked in hazardous locations will have the lock or chain cut, and the vehicle will be impounded by Department of Campus Police for safekeeping.

Accidents: Colorado law requires that all accidents be reported to the proper authorities. Accidents occurring on PPCC Campuses must be reported to the Department of Campus Police at 719-502-2911.

Information concerning PPCC vehicle regulations may be obtained from Department of Campus Police in A-100, or by calling ext. 2900 at the Centennial Campus and in N-106 at the Rampart Range Campus.

Safety Escort Service: Safety Escort Service is available through the Department of Campus Police, contact 719-502-2911.

Days of Enforcement

Parking and traffic regulations are enforced on all College properties. Handicapped parking violations are enforced at all times.

Behavioral Intervention Team (BIT)

PPCC's Behavioral Intervention Team (BIT) is a team of individuals across campus who are trained and focused on supporting a safe learning and working environment for the college community.

PPCC's BIT works to identify and intervene when student behaviors signal that deeper concerns may be present. Our goal is to become involved early in student issues – before incidents become crises. We depend upon **you** to help us promote a safe and productive PPCC community. PPCC's BIT is committed to addressing your concerns quickly and effectively.

You should report if someone you know is experiencing ...

- Personal problems
- Family problems
- Changes in behavior
- Changes in appearance
- Health problems
- Crying
- Talking to self
- Poor attendance
- Changes in social interactions
- Appearance of substance or alcohol abuse
- Expresses dark thoughts
- Changes in communication
- Being bullied
- Writing or making disturbing comments

These and other behaviors may be a signal that a someone is in need of support. PPCC is its strongest when each of us takes the time to actively care about each other. If you think a student may need support, submit a report! You may report anonymously, and please know that PPCC's BIT takes all reports seriously. The earlier we know something is going on, the sooner we can help.

What Happens When I a Report?

- Review your report and contact you (if you've provided contact information) if we need more information
- Assess the case using an objective Risk Assessment Tool
- Intervene using the resources best equipped to support the student
- Within privacy-law boundaries, we may provide you an update.

How Do I Make a Report?

You may make a report at www.pgcc.edu/concern

If someone is an immediate threat to themselves or someone else, **CALL 9-1-1 IMMEDIATELY.**

The emergency number 911 should only be used in emergency situations when a police officer, fire fighter, or paramedic is needed right away. If you are ever in doubt, call 911. 911 should not be used for non-emergencies.

Emergencies and Crime Reporting

For emergencies dial 911.

The emergency number 911 should only be used in emergency situations when a police officer, fire fighter, or paramedic is needed right away. If you are ever in doubt, call 911. 911 should not be used for non-emergencies.

All emergencies and suspected criminal actions must be promptly reported to the Department of Campus Police. Campus Police officials will take whatever action is deemed necessary to protect life and property and to enforce all Federal and State laws and regulations.

The Department of Campus Police monitors and records all known criminal activities associated with the College, including criminal activity associated with off-campus student organizations.

The Crime Prevention section of the Department of Campus Police offers programs to the campus community. Operation Identification and 911 Readiness are offered for children at the

Child Development Centers. Operation Identification kits may be picked up at any Campus Police office.

The Colorado State Legislature has granted authority to commissioned officers of the Department of Campus Police to enforce all laws and regulations. Officers work in cooperation with State and local law enforcement agencies.

Emergency Notification

Each campus uses various forms of communication as indicated below. Recognizing the high number of part time employees, adjunct instructors and turnover among students in our college community, emergency communication will be in plain language rather than code. Each classroom, office, or work area is equipped with a "flip chart" style Emergency Response Guide (ERG), which lists the most common types of emergencies alphabetically and provides clear, bulleted and step-by-step guidance on what specific actions to take during any one particular emergency.

Centennial Campus:

All PPCC campuses, staff, students and faculty, are served by the Blackboard Connect emergency mass notification system. Persons are invited to sign up, at no cost, through the college web site at www.ppcc.edu/public-safety/notification. The Mass Emergency Notification system allows the college to send emergency messages to its entire community via e-mail, text (SMS), and/or voice mail to users' cell and / home phones. Users, however, must subscribe and "opt in" to the service. Standard text messaging costs may apply. Blackboard Connect messages are broadcast at the direction of any member of the Policy Group or Director of Campus Police or any of their respective representatives. Blackboard Connect messages are published and distributed by the Chief Technology Officer or his representative.

Centennial Campus alarm system is also equipped with a public announcement system (PA) for Aspen, Breckenridge, Student Center and Faculty Offices Buildings. This system will be used to announce any event or emergency.

The Centennial Campus is also equipped with multiple strategically placed LCD television screens capable of broadcasting both "screen shot" and scrolling messages. When necessary and appropriate, the Chief Technology Officer or his representative will update the messages to inform the college community of emergency situations.

Emergency messages will be communicated to the Child Development Center (CDC) by a Campus Police employee speaking with the Director or Manager of the CDC.

Emergency messages will be communicated to the Police Training Center/Firing Range (CDC) by a Campus Police employee speaking with on-duty personnel at the Center/Range.

Emergency messages will be communicated to the Grounds Shop by a Campus Police employee speaking with on-duty personnel at the Shop.

Rampart Range Campus:

All PPCC campuses, staff, students and faculty, are served by the Blackboard Connect emergency mass notification system. Persons are invited to sign up, at no cost, through the college web site at www.ppcc.edu/public-safety/notification. The Mass Emergency Notification system allows the college to send emergency messages to its entire community via e-mail, text

(SMS), and/or voice mail to users' cell and home phones. Users, however, must subscribe and "opt in" to the service. Standard text messaging costs may apply. Blackboard Connect messages are broadcast at the direction of any member of the Policy Group or Director of Campus Police or any of their respective representatives. Blackboard Connect messages are published and distributed by the Chief Technology Officer or his representative.

The Rampart Range Campus alarm system is also equipped with a public announcement system (PA) for the Main Building. This system will be used to announce any event or emergency.

The Rampart Range Campus is also equipped with multiple strategically placed LCD television screens capable of broadcasting both "screen shot" and scrolling messages. When necessary and appropriate, the Chief Technology Officer or his representative will update the messages to inform the college community of emergency situations.

Emergency messages will be communicated to the Child Development Center (CDC) by a Campus Police employee speaking with the Director or Manager of the CDC.

Emergency messages will be communicated to The Classical Academy (TCA) by a Campus Police employee speaking with on-duty personnel there.

Specific rooms and/or wings of the campus will be notified by designated college personnel, when reasonable to do so, going room to room to advise of the emergency.

The Downtown Studio Campus:

All PPCC campuses, staff, students and faculty, are served by the Blackboard Connect emergency mass notification system. Persons are invited to sign up, at no cost, through the college web site at www.ppcc.edu/public-safety/notification. The Mass Emergency Notification system allows the college to send emergency messages to its entire community via e-mail, text (SMS), and/or voice mail to users' cell and home phones. Users, however, must subscribe and "opt in" to the service. Standard text messaging costs may apply. Blackboard Connect messages are broadcast at the direction of any member of the Policy Group or Director of Campus Police or any of their respective representatives. Blackboard Connect messages are published and distributed by the Chief Technology Officer or his representative.

The Downtown Studio Campus is also equipped with one LCD television screen mounted in the Student Lounge capable of broadcasting both "screen shot" and scrolling messages. When necessary and appropriate, the Chief Technology Officer or his representative will update the messages to inform the college community of emergency situations.

Specific rooms and/or wings of the campus will be notified by designated college personnel, when reasonable to do so, going room to room to advise of the emergency.

Reporting Criminal Offenses

To report any emergency, dial 911 or pick-up any Emergency phone located through-out campus buildings and parking lots.

Violent crimes considered a threat to students and employees are promptly reported to the campus community.

Rioting Offenses

Prohibition against enrollment in state-supported institutions of higher education of persons convicted of rioting offenses:

Under Colorado law, no person shall be enrolled in a state-supported institution of higher education for a period of twelve months following the date of a guilty verdict, guilty plea, no contest plea, or a deferred judgment and sentence for inciting riot, arming rioters, or engaging in a riot.

Sex Offender Registration

In accordance with the Campus Sex Crimes Prevention Act of 2000, the Campus Police Office shall maintain a list of all sex offenders who are currently enrolled or employed at Pikes Peak Community College and make said list available to students and employees. All sex offenders are required to register in the state of Colorado and to provide notice of each institution of higher education in Colorado at which the person is employed, carries a vocation or is a student.

List of sex offenders registered at the College are maintained online at www.pccc.edu/campus-police/.

Campus Crime and Security Report

The Crime Awareness and Campus Security Act, a public law, requires the College to disclose information regarding criminal activities and security at Pikes Peak Community College and/or on adjacent public properties.

No crimes were determined to be hate related.

Report of Criminal Offenses

Centennial Campus

Offense (Includes attempts)	2017	2018	2019
Murder & Non-Negligent Manslaughter	0	0	0
Negligent Manslaughter	0	0	0
Forcible Sex Offenses	1	0	0
Non-Forcible Sex Offenses	0	0	0
Robbery	0	1	0
Aggravated Assault	0	4	1
Burglary	2	5	0
Motor Vehicle Theft	0	0	1
Dating Violence	0	0	0
Domestic Violence	1	3	0
Stalking	1	1	1
Arson	0	2	0
Failure to Appear Warrant Arrests	0	0	0
Arrests Made			
Liquor Law Violations	0	2	0
Drug Law Violations	1	4	0
Weapons Law Violations	0	3	1
Non-Clery Reportable Crimes			
Larceny	20	7	6
Failure to Appear Warrant Arrests	0	1	0

No crimes were determined to be hate related.

Downtown Studio Campus

Offense (Includes attempts)	2017	2018	2019
Murder & Non-Negligent Manslaughter	0	0	0
Negligent Manslaughter	0	0	0
Forcible Sex Offenses	0	0	0
Non-Forcible Sex Offenses	0	0	0
Robbery	0	0	0
Aggravated Assault	0	0	0
Burglary	0	0	0
Motor Vehicle Theft	0	0	0
Dating Violence	0	0	0
Domestic Violence	0	0	0
Stalking	0	4	0
Arson	0	0	0
Arrests Made			
Liquor Law Violations	0	0	2
Drug Law Violations	0	0	0
Weapons Law Violations	0	0	0
Non-Clery Reportable Crimes			
Larceny	3	3	2
Failure to Appear Warrant Arrests	0	0	0

No crimes were determined to be hate related.

Rampart Range Campus

Offense (Includes attempts)	2017	2018	2019
Murder & Non-Negligent Manslaughter	0	0	0
Negligent Manslaughter	0	0	0
Forcible Sex Offenses	0	0	0
Non-Forcible Sex Offenses	0	0	0
Robbery	0	0	0
Aggravated Assault	0	0	0
Burglary	0	0	0
Motor Vehicle Theft	0	0	0
Dating Violence	0	0	0
Domestic Violence	0	0	0
Stalking	0	0	0
Arson	0	0	0
Arrests Made			
Liquor Law Violations	0	1	0
Drug Law Violations	1	0	0
Weapons Law Violations	0	0	0
Non-Clery Reportable Crimes			
Larceny	1	3	0
Failure to Appear Warrant Arrests	0	0	0

SERVICES FOR STUDENTS

In This Section

Accessibility Services	41
Advising and Testing	42
Career and Retention Services.....	42
Child Development Centers.....	42
Computer Labs.....	43
Copy Center	43
Department of Campus Police	43
Information Technology Support Services	43
Learning Commons - Tutoring	43
Library.....	44
Ombuds	44
Records.....	44
Southern Colorado Educational Opportunity Center (SCEOC)	44
The Counseling Center.....	44
TRIO Disability Student Support Services	45
TRIO Student Support Services	45
Visitation Program (Four-year Colleges & Universities).....	45

Accessibility Services

Centennial • A-115 • 719-502-3333

Downtown Studio • D0-S126 • 719-502-3333

Rampart Range • S-202 • 719-502-3333

Accessibility Services strives to create an accessible environment by providing reasonable and appropriate services and accommodations for students with disabilities. The College is committed to providing quality educational support for the diverse needs of its students.

Support services and accommodations may include:

- Computer Assistive Technology
- alternative testing arrangements
- advocacy training
- identification of strengths and weaknesses
- instruction in learning strategies
- readers/scribes for accommodative testing only
- text in alternate formats
- interpreting services (Sign Language)

Accessibility Services is available to the PPCC community – students, faculty, and staff – for consultation and collaboration on disability issues.

It is the responsibility of students requesting an accommodation due to a qualifying disability to self-identify by registering with Accessibility Services, to apply for supportive services, and to furnish documentation, if requested, about the nature and extent of their disability. This information is kept confidential and will be used to plan for appropriate services and accommodations. Students must meet with their disability specialist prior to the beginning of each semester to discuss arrangements for needed timely accommodations. The College is not obligated to provide or continue to provide accommodations that are not approved by Accessibility Services.

Informing other staff or faculty does not constitute registering with Accessibility Services. Accommodation requests are evaluated individually to make a determination regarding the provision of

reasonable accommodations based on a review and analysis of documentation and circumstances.

Determination of accommodations can be an involved and lengthy process; therefore, students are encouraged to begin the Accessibility Services registration process and submit any required documentation as soon as possible. For incoming students, this should be done eight weeks prior to their first semester. For current Accessibility Services students, accommodation renewal appointments should also be made eight weeks prior to each semester to allow time to provide supported accommodations in a timely manner. Students who don't meet these timelines are still encouraged to call Accessibility Services for information or an appointment.

Proof of purchase for textbooks is required before alternate format materials can be ordered which can take up to eight weeks to receive.

It is Accessibility Services' practice to NOT support accommodations on a provisional basis. However, students who receive provisional accommodations must provide the required documentation in order to continue receiving accommodations beyond the one semester of provisional accommodations. Updated documentation may be required depending on the disabling condition, current status of the student and the student's request for accommodations.

Please note the following:

1. Accommodations will not be provided even on a provisional basis if there is no indication of a qualifying disability as determined by an Accessibility Services Accommodation Request Determination review. Also, the following may not permit the implementation of any supported accommodation(s): required course Standard Competencies; required essential job duties of an internship or practicum; or degree requirements or national technical standards. Please check with your program area regarding requesting contact information to request accommodations for any professional certification of licensure testing that is not administered by the College. Please refer to the Instructor's Notification of Accommodations (accommodations letter) for requests that are not guaranteed accommodations because they are discretionary.
2. Documentation accepted by and accommodations provided by PPCC/Accessibility Services may or may not be accepted by testing agencies or other higher education institutions.
3. Accommodations provided in the academic environment may or may not be provided at internships, clinical sites, or in the workplace. Please consult with your program adviser and/or Department Chair and Human Resources at your place of work.

It is the student's responsibility to self-advocate for approved accommodations that are not being provided since accommodations cannot be provided retroactively.

All students, with or without a disability, must adhere to the Student Code of Conduct.

Assistive Technology Lab. The Assistive Technology Lab is located at the Centennial Campus. The lab utilizes computer assistive

technology such as screen readers, voice recognition, alternative input/output devices, and screen magnification. Training opportunities combining word processing and assistive technology are offered.

Interpreting Services. Interpreter, Oral, and Transliteration services are available for Deaf and hard of hearing students. Call 502-3026 or VP 358-2453 for more information.

Advising and Testing

Centennial • A-119 • 719-502-3232
Downtown Studio • S102 • 719-502-3232
Rampart Range • S-101 • 719-502-3232

Advising & Testing supports student learning by aiding students in deciding what degree or certificate they can pursue to meet their career goals; how to choose courses that provide the shortest path to their chosen goal; and if they are best prepared to start with college level course work. Advising & Testing provides students with information on transferring to 4-year schools; career readiness; faculty advising; and registering for classes. Visit our webpage at: www.pgcc.edu/advising or one of our Advising & Testing offices which are available at all PGCC campuses.

Academic Advising

- Career counseling (individual and group) to help with decision-making, goal setting, and choosing a college course of study
- Career assessments to match personal characteristics with occupational options
- Explanation of basic skills (placement test) results, and assistance in selecting the correct classes based upon a student's degree and placement results
- Information on course sequence and prerequisites
- Help in adding or dropping classes
- Assignment of a faculty advisor
- Assistance with changing a course of study or faculty advisor, www.pgcc.edu/records/change-of-major

Career Planning

- Career counseling (individual and group) to help with decision-making, goal setting and choosing a college major
- Workshops on resume writing, job search techniques, and interviewing
- Employment services to help students market themselves and find a job, www.pgcc.edu/career-services
- Information on the local labor market and planning a job search
- Career Connection online employment opportunities system (available for current PGCC students and graduates)

Testing

Centennial • A-117 • 719-502-3370
Downtown Studio • S102 • 719-502-3390
Rampart Range • S-101 • 719-502-3380

In addition to placement testing, the following testing services are offered:

- CLEP and DSST testing for college credit
- GED testing for the Colorado High School Equivalency Diploma
- Online course testing and classroom make-up testing
- Various certification exams

All new students entering English as a Second Language (ESL) must take a placement test. This test will place new students into one of three levels: basic, intermediate, or advanced. The test is available on computer at all three campuses. ESL students should call 719-502-3535 for further information.

Accommodations are available for students with documented disabilities. Contact Accessibility Services to make arrangements for accommodated testing. 719-502-3333.

Please call any of the Testing Centers for additional information.

Career and Retention Services

Centennial • A-316 • 719-502-2360
Downtown Studio • DO-S126 • 719-502-2360
Rampart Range • S-207 • 719-502-2360

The Career and Retention Services department offers a variety of services to support student success at PGCC. Whether you're a new or currently enrolled student, you can meet with one of our Success Coaches to receive detailed information on PGCC services and referrals to campus and community resources.

Listed below are just some of the resources we can assist with and refer PGCC students to:

- Connections to community agencies
- Food
- Job searches
- Mentoring
- Navigating PGCC
- Technology
- Transportation
- Tutoring
- and more. . .

Please visit our website at www.pgcc.edu/retention-services for available walk-in times and campus locations to meet with a Success Coach or please call our office at 719-502-2360 to schedule an appointment.

Child Development Centers

Centennial • 719-502-2323
Rampart Range • 719-502-2424

www.pgcc.edu/cdc

The Child Development Centers located at the Centennial and the Rampart Range Campuses offer comprehensive educational childcare services for children age six weeks to five years in infant, toddler, and preschool programs. Children participate in art activities, science, math, music, creative play, language arts, and outdoor play. Hours of operation are Monday – Friday from 7:15 a.m. to 5:30 p.m.

The CDC's are licensed by the Colorado Department of Human Services, a Quality Level 4 rating from Colorado Shines and are accredited by the National Association for the Education of Young Children. The Centers are staffed by certified early childhood teachers who are assisted by student staff teacher aides. The Centers serve as a practicum site for students enrolled in the Early Childhood Education Program.

Children of Pikes Peak Community College students, staff, and faculty are eligible to enroll. Cost of childcare is on an income-based sliding scale; other financial assistance may be available. Community families are welcome to enroll on a space available

basis and are not eligible for the sliding scale. Advance registration is required for all programs. Some classrooms may have a waiting list. The waiting list form can be completed online at www.pgcc.edu/cdc.

Computer Labs

Centennial • 719-502-2442

Downtown Studio • 719-502-2443

Rampart Range • 719-502-2408

ITSS computer labs at the Centennial, the Downtown Studio and Rampart Range campuses are available to students, faculty, and staff. ITSS computer labs are also open evenings and weekends to provide students with extended access to technology resources. Hours of operation vary by semester and by campus, so please call 719-502-2442 for current lab hours or visit www.pgcc.edu/computer-services/.

Lab staff is available to assist students, faculty, and staff with questions and/or problems in the computer labs. Students seeking tutoring services should contact the Learning Commons - Tutoring at 719-502-3444.

Centennial Campus Computer Lab. Located in room A-300, the computer lab at Centennial campus has 130 computers including both PCs and Macs. The Centennial Campus computer lab includes a multimedia area available for students emphasizing Multimedia Graphic Design (MGD) and Computer Aided Drafting and Design - Mechanical programs. This area of the lab is available for all students, faculty, and staff with preference given to those students currently enrolled in MGD and CAD classes.

Downtown Studio Campus Computer Lab. Located in room DO-S207, the lab is equipped with 20 computers including both PCs and Macs. Access to the Internet, as well as the instructional network, is provided to assist students with their coursework.

Rampart Range Campus Computer Lab. Located in room E-203, this computer lab is equipped with 33 computers including both PCs and Macs. Each computer has access to the Internet, as well as the instructional network, is provided to assist students with the completion of coursework.

Copy Center

Centennial • C-101 • 719-502-2111

Services are available to students, faculty, and staff for both personal and work-related jobs. The Copy Center is open Monday through Friday, 8:00 a.m. to 5:00 p.m. and offers black and white copies and transparencies; color printing; color banners and posters; design, layout, and production services; folding, binding, padding, and hole punching.

Department of Campus Police

Centennial • A-100 • 719-502-2911

Downtown Studio • DO-S101 • 719-502-2911

Rampart Range • N-106 • 719-502-2911

The Department of Campus Police is located at all campuses. The officers at all campuses can be reached via telephone at 719-502-2911. Emergency calls should be directed to 719-502-2911. The Department of Campus Police is staffed by 17 state certified peace officers. All PGCC Campus Police officers are commissioned State peace/police officers. They have full police authority and

function the same as any other law enforcement agency in the State of Colorado and on College property.

Information Technology Support Services

Centennial Main Office • B-201 • 719-502-4800

Centennial Computer Lab • A-300 • 719-502-2442

Downtown Studio Computer Lab • DO-S207 • 719-502-2443

Rampart Range Computer Lab • E-203 • 719-502-2408

The Information Technology Support Services (ITSS) division provides a wide variety of technology services to the College, as well as limited service to the Colorado Community College System and other State entities. Our services span desktop-to-server-to-mainframe computing, networks, telecommunications, Internet connectivity, administrative and academic systems, security, instructional technology, computer labs, plus many support services.

ITSS works with College divisions and departments to develop and implement new systems and technologies. At the same time, we provide quality service and support to all members of the College community.

ITSS provides current students with an account on the instructional network and an e-mail address accessible via the Internet.

Classroom and lab computers are networked with access to the Internet and the instructional network. Each full-service campus has its own local area network (LAN). All campus LANs are linked via redundant fiber optic connections to provide students, faculty, and staff with the ability to seamlessly access data from any campus. Regular backups are performed to ensure that coursework and other data are recoverable in the event of a disaster.

Wireless Access. Wireless access to the Internet is available across all areas of the Centennial, Downtown, and Rampart Range Campuses.

IT Service Desk. The IT Service Desk is located in room B-201 at Centennial Campus and is open Monday-Friday from 8:00am to 5:00pm and Fridays from 9:00am to 5:00pm. The help desk can be reached 24/7 via telephone at 1-888-800-9198 or online at help.pgcc.edu/.

Learning Commons - Tutoring

Centennial • A200 • 719-502-3400

Downtown Studio • DO-N204 • 719-502-2318

Rampart Range • N200 • 719-502-2318

www.pgcc.edu/learning-commons/tutoring

The mission of our Learning Commons is to promote student persistence by reinforcing the importance of supplemental support, collaborative inquiry, and independent learning. Students, faculty, and staff are encouraged to take advantage of the free academic resources offered in Learning Commons. Tutoring resources include the following:

- Drop-in and appointment-based tutoring for many subjects, including math, writing, and sciences
- EdReady, a free personalized learning resource to help students strengthen math and writing skills
- College Success Workshops

- Fellows Tutoring, embedded tutoring support in certain STEM and writing intensive courses
- Live and asynchronous online writing support

Students seeking tutoring and other academic support services should:

- Follow the course sequence outlined by their academic advisor (tutoring does not take the place of prerequisite courses)
- Attend classes, participate and engage with the academic material
- Come to sessions prepared with all relevant course material including notes, textbooks, and assignment descriptions

Schedules for all services are available on the Learning Commons website. In person tutoring sessions are drop-in and appointment-based, while online serves are drop-in or asynchronous. More information about tutoring services at the Learning Commons can be found on our website.

Library

Centennial Learning Commons • A-200 • 719-502-2400

Rampart Range • N-201 • 719-502-2440

www.pgcc.edu/library

The Library provides a supportive learning and study environment at the Centennial Learning Commons and the Rampart Range Campus Library. Services provided at both locations include research assistance and workshops, study rooms, computer access and interlibrary loan. Research assistance is available at the Downtown Studio Campus two days/week. Resource materials include electronic databases, 150,000+ eBooks, online subject-specific research guides, print books and magazines, DVD's, audio books. Electronic resources are available off-campus.

Reference and Research Service

Our professional reference librarians serve as information guides to help students, faculty, staff, and community users find their way to the most relevant sources, whether using databases, the web, or print resources. The reference staff also provides research instruction to classes, creates online research subject guides and videos. Reference librarians and peer research tutors are available for research assistance in-person, virtual chat, texting, email and by phone.

Ombuds

Centennial • A-324 • 719-502-2012

The PPCC Student Ombuds is a neutral person available to assist students who are seeking resolution to problems or concerns relating to their educational experience at PPCC. The Ombuds can help students navigate college organizational structure and bureaucracy and assist with understanding of policies and procedures. For additional information call 719-502-2012 or email ombuds@pgcc.edu.

Records

Centennial • A-107 • 719-502-3000

Downtown Studio • D0-S100 • 719-502-3000

Rampart Range • S-102 • 719-502-3000

All records of enrollment at PPCC are kept in the Student Services Centers. Transcripts are available upon request within certain timelines, normally one to three days for processing. Transcripts are not released without the student submitting a transcript request form and will not be released until all accounts with the

College are current. Students may view their records and ask to have information corrected or kept private. Transcript request instructions can be found online at www.pgcc.edu/records/request-transcripts.

The College releases directory information upon legitimate request. Directory information is defined as a student's name, semesters attended, most recent previous school attended, major field of study, and degrees and awards received. To keep this information private, students may file a written request with the Student Services Centers. The form is located at www.pgcc.edu/records.

All students attending classes at PPCC are assumed to be independent, and therefore, information, other than directory information, is not provided to parents or other persons or agencies unless the student authorizes the release of data by completing the FERPA Student Consent form.

No transcript or information other than that listed above is normally released to the public without written consent that specifies the information to be released. The College releases records and accounts to appropriate U.S. government representatives in compliance with federal statutes. In addition, certain state officials may lawfully be entitled to information from student records.

Information concerning the Family Educational Rights and Privacy Act is available in the Students Services Centers and online at www.ed.gov/policy/gen/guid/fpco/ferpa/index.html.

All application/records materials become property of PPCC when submitted to the institution.

Southern Colorado Educational Opportunity Center (SCEOC)

Centennial • A-110 • 719-502-3028

The SCEOC helps low-income or first-generation college students. Services include help with completion of financial aid and admission applications, guidance in selecting a college, and information about current scholarships as well as online scholarship searches, federal tax preparation, career counseling, testing, and workshops. All services are free.

The Counseling Center

Centennial • A-141

Downtown Studio • D0-S126a

Rampart Range • N-107c

Between classes, work, family, finances and regular life events, college students encounter a great deal of stress over the course of their education. While most students cope successfully with the demands of college life, for some the pressures can at times become overwhelming and unmanageable. At those times, The Counseling Center is here to help. We have licensed counselors who provide confidential counseling sessions, intervention and support, and referrals to campus and community resources as well as for ongoing counseling and Mental Health care.

To reach our Counselors call 719-502-4782. If you or another person experiences a mental health crisis or other emergency outside of normal business hours, call Campus Police at 2911 from campus. If you are off campus go to your nearest Emergency Room or dial 911.

As always, if you are on campus and experience or observe a dangerous situation call Campus Police at 2911.

Online resources are also available at www.ulifeline.org/, an anonymous, internet-based resource that provides students with non-threatening and supportive links to information and resources, and information regarding stress, pressures of college life, depression or mental illness and more. ULifeline was created by students for students with the support of the JED Foundation and under the supervision of respected mental health professionals (adapted from www.jedfoundation.org retrieved January 2007).

Important Note: By acting as a resource broker for the aforementioned services (i.e. counseling, treatment, re-entry programs and rehabilitation services), the State of Colorado, the State Board for Community Colleges and Occupational Education (SBCCOE), Pikes Peak Community College and its former and current employees assume no responsibility/liability for the services (or lack thereof) provided by the referred agency or agencies.

Pikes Peak Community College, the State of Colorado, the State Board for Community Colleges and Occupational Education (SBCCOE), and its former and current employees are not responsible for any content on Ulifeline's website that is posted outside of PPCC's dedicated web space.

TRIO Disability Student Support Services

Centennial • A-130 • 719-502-3900

www.ppcc.edu/dsss

Disability Student Support Services (DSSS) is a federally funded grant program that helps to increase the number of college students with disabilities in the United States to successfully complete a program of study at the postsecondary level.

TRIO Disability Student Support Services is to support students with disabilities by removing barriers to student learning and empowering students to achieve success in their personal and career goals. Through the services we provide, we strive to help our students graduate, attain certification, or transfer.

DSSS serves a limited number of students every year and we invite you to apply in person or online at www.ppcc.edu/dsss.

Eligibility

We provide support to students who meet the following criteria:

- U.S. citizen or Permanent Legal Resident and,
- Documented disability (on file with Accessibility Services)

TRIO Student Support Services

Centennial • A-130 • 719-502-3222
Downtown Studio Campus • D0-S126
Rampart Range Campus • S-102f

www.ppcc.edu/student-support-services

The TRIO Student Support Services Office is available to help low income and first-generation students graduate and transfer to a four-year college and all of our services are FREE.

Student Support Services offers the following services to program participants:

- One-on-one tutoring in multiple subjects, including math
- Assessment of learning strategies and study skills
- Customized study skills help
- Academic and career planning
- Four-year college university campus tours and transfer advising
- Professional and peer academic mentoring
- Scholarship and financial aid searches
- Financial and economic literacy workshops
- Pre-semester conferences and workshops

We serve a limited number of students every year and we invite you to apply. You can pick up an application at our Centennial Campus office or download from www.ppcc.edu/student-support-services.

Requirements

U.S. Citizen or legal permanent resident, low-income, First Generation, have a disability, or are a Veteran.

Visitation Program (Four-year Colleges & Universities)

All Campuses • 719-502-3232

Representatives from four-year schools regularly visit Pikes Peak Community College to meet with students who plan to transfer after receiving an Associate's Degree from PPCC. The schedules are available online.

STUDENT LIFE

In This Section

Activities.....	46
Campus Center.....	46
ID Cards.....	46
Office of Sustainability.....	46
Recreation and Wellness.....	46
Student Clubs and Organizations.....	47
Student Government.....	47

Student Life

Centennial Campus • A-210 • 719-502-2522

Downtown Studio Campus • DO-N106b • 719-502-2538

Rampart Range Campus • S-207 • 719-502-2577

Activities

The Student Activities Office offers a full schedule of cultural, wellness, arts, and topical events aimed at enriching student life on campus. Some examples of past events are De-Stress Fest, Label Jars Not People, Multicultural Awareness Conference, Casino Night, International Festival, Tables of Brotherhood and Film Screenings. These events are either stand-alone or co-curricular, teaming up with Faculty to enhance learning outside of the classroom. Lifestyle activities include blood drives and personal growth focused programs. Student Activities includes a focus on inclusive programming such as Black History Month, Indigenous History Month, LatinX History Month, Women's History Month, Asian/Pacific Islander History Month and LGBTQIA History Month. Current events are covered with a wide range of speakers, panels, forums and workshops. The Student Activities Office invites your ideas and participation. Please call 719-502-2091 for more information.

Campus Center

Centennial Campus houses a campus center, called The Grove, where student faculty and staff can relax and build community. This facility is "home away from home" where one can find a lounge area, study space, TV, free Wi-Fi, music and games. Student Government is located across the hall. Student Life Offices are located here. The Downtown Studio and Rampart Range Campuses each house student space for lounges, study areas, activities, vending machines and Student Life.

Mission Statement: Student Life invests in student success by building community through programs, services and environments that inspire learning, promote personal growth, and foster responsible citizenship.

ID Cards

Every PPCC student needs a photo Student Identification Card. A properly validated Student ID Card enables students to use the Library to check out materials or use the computer lab or other services. It also entitles students to free or reduced admission to student plays, dances, events, and other activities.

Students may obtain a Student ID Card their first semester at PPCC at the Campus Center Info Desk at Centennial, the

Downtown Studio or Rampart Range Campuses. This ID is valid for the student's entire career at PPCC. If the ID Card is lost, students can obtain a replacement ID for a charge. Proof of identification such as a driver's license, photo ID, etc., is required for all new and replacement IDs.

Other Photo ID's. The Student Life office will also produce special ID's for nursing practicum students, Fitness Center members, etc. upon special arrangement for a nominal charge.

Office of Sustainability

Sustainability is relevant to all academic, technical, and vocational programs. As an individual, sustainability teaches students how to save money, improve health, and reduce waste. As a student, sustainability explores the connections between economic prosperity, social equity, and environmental sustainability. These concepts and practices prepare students to address society's most pressing problems and give them a competitive advantage in applying for jobs.

Common at most universities, Pikes Peak Community College is the first and only community college in Colorado to have a dedicated Office of Sustainability. Our vision is for a thriving, equitable, and resilient Pikes Peak Community College. Our mission is to work alongside students, faculty, and staff to develop a culture of resource conservation, social responsibility, and financial stewardship. The Green Campus Fee of \$0.39 per credit hour supports a sustainability coordinator and operating budget.

Our Services

- **Employment:** We provide employment opportunities for all students.
- **Engagement:** We partner with staff and faculty to plan events and activities.
- **Curriculum:** We support faculty in incorporating sustainability into their classes.
- **Operations:** We advise staff on reducing waste, increasing resource efficiency, and purchasing sustainable products and services.
- **Strategic Planning:** We collaborate with administrators to integrate sustainability into the college's strategic plan and conduct college-wide sustainability assessments.

To learn more and get involved, visit our website: www.ppcc.edu/sustain.

Recreation and Wellness

Centennial Campus • A-262 • 719-502-2555

The Recreation and Wellness Office is in the Centennial Campus Fitness Center/Gymnasium. The Fitness Center is a state-of-the-art cardiovascular/weight training facility with full functional training areas and much more. The facility has computerized bicycles and treadmills; a weightlifting circuit, elliptical trainers, AMTs; stair stepper, C2 rowers, Airdynes, bench press, squat stations, dumbbells, kettlebells, medicine balls and much more.

The gymnasium is open for recreation use by students and staff as long as academic classes are not taking place. Open gym activities include basketball, volleyball and spikeball. The recreation program includes monthly challenges, recreational tournaments, wellness events and outdoor equipment rentals. The office schedules/coordinates the gymnasium, track and soccer field.

PPCC has three independent sports teams. Co-ed soccer, martial arts, and volleyball teams that compete in recreation leagues. The club sports teams are housed at the Centennial Campus in the Recreation and Wellness Office. For more information about the athletic programs, call 719-502-2555.

The Fitness Center/Gymnasium are open to all currently enrolled students. A brief orientation and Student ID are required to gain access to the facility. If you have any questions, please contact office at 719-502-2555.

Student Clubs and Organizations

More than 20 active student clubs and organizations are available on campus. Some are active relative to an academic/professional area such as Phi Theta Kappa (PTK), Phi Beta Lambda (PBL), Club America Sign Language (CASL), Nurses Organization (PPCCANS) and Student Veterans of America (SVA), etc. Others are related to activities/interests such as basketball, skiing. Still others are active along multicultural/ethnic interest lines, such as Japanese Culture Club, Multicultural Student Union, etc. Involvement in clubs and organizations is a great way to meet students, to learn and practice leadership skills, and to gain a sense of belonging and loyalty to PPCC.

Student Government

Participation in Student Government is a great way to strengthen leadership skills. Student leaders work on various issues affecting students and allocate student activity fees to enhance campus life. Student Government is composed of the president, vice president, secretary, and treasurer; 12 senators; and a State Student Advisory Council representative.

Elections are held during spring term. The executive officers are elected during spring term. All elections are now done via an online ballot, watch your student e-mail accounts for information.

SERVICES FOR THE COMMUNITY

In This Section

Activities and Events	48
Career Advancement, Customized Training and Workforce Development.....	48
The Downtown Studio Gallery	48
KEPC Radio - 89.7 FM.....	48
PPCC-tv.....	48

Because we are a community college, we continually develop new ways to contribute to our community. To make education more accessible, we offer classes at a variety of locations and times. eLearning and outreach locations make classes convenient for residents in all parts of our service area. We work with local school districts to provide educational opportunities for high school students.

Activities and Events

As a service to the community, PPCC opens all of its campus activities and events to the public, many free of charge. A sampling of public activities and events are as follows:

- African American History Month
- Cinco de Mayo Events
- Family Events
- Living History Series
- Native American Heritage Events
- Social Activities
- Veteran's Day Observance
- Women's History

For more information, call the Student Life Office at 719-502-2522.

Career Advancement, Customized Training and Workforce Development

The Workforce Development Division provides career advancement courses for individuals and customized training programs for employers. Affordable non-credit courses are available online and in the classroom throughout the year. During the summer, our Teen College camp offers incoming 7th, 8th and 9th graders fun experiential weekly sessions to explore career pathways.

Workforce Development also offers customized training programs which include a diverse assortment of training solutions and services to help employers meet their training needs. Employers are offered a free training assessment and provided with recommended solutions. In addition, industry-focused, entry-level job training programs are offered to meet the immediate hiring needs of local companies.

The Division also administers grants to assist companies with funding workforce training. For more information, access our webpage at <https://www.ppcc.edu/workforce-development>, or call the Workforce Development Division at 719-502-2404.

Located at the Catalyst Campus for Technology & Innovation, the PPCC Cyber Range provides a controlled virtual environment where cybersecurity students and security professionals can practice their skills and prepare for real-world situations.

For more information, contact our office at 719-502-2404 or email contactce@ppcc.edu.

The Downtown Studio Gallery

The Downtown Studio Gallery is located in the Downtown Studio Campus of Pikes Peak Community College at 22 N. Sierra Madre Avenue. It is a public gallery with a multicultural emphasis. Six to eight exhibits created primarily by artists in the Pikes Peak region, including faculty and students, are offered each year, free and open to the public. Opening receptions often include music, poetry, and dance performances that enhance the theme of the show. For more information, call 719-502-4040.

KEPC Radio - 89.7 FM

Students in the Radio and Television program at Pikes Peak Community College can be heard in Colorado Springs on 89.7 FM, 93.3 in Pueblo and 89.1 in Manitou Springs. Broadcasting in high definition (HD) with nearly 10,000 watts of power, KEPC programs provide a wide variety of music and other programming.

Throughout the semester, PPCC Radio and Television students produce many public service announcements and promotional announcements of interest to PPCC students and community members. Listeners will receive information about the community as well as PPCC activities and events, many that are free and open to the public.

KEPC is on the air 24 hours a day, seven days a week. KEPC can be heard live globally on the Internet at www.ppcc.edu/KEPC/ or on your favorite radio app.

For more information, call 719-502-3131.

PPCC-tv

You can see the results of all the hard work Radio and Television students put into their video work on PPCC-tv, channel 21 on Comcast, 78 on Falcon Broadband, and 8002 on CenturyLink PrismTV. Broadcasting twenty-four hours a day, seven days a week, all programming is student produced and the channel is student driven.

Featuring interviews, profiles of other PPCC programs, showcases of student and artist works, public service announcements, and promotional announcements of interest to PPCC students and community members. Viewers get a peek inside student life at PPCC, get community news and information, and encapsulations of PPCC activities and events.

MILITARY, VETERANS, AND FAMILY MEMBERS

In This Section

Military and Veteran Affiliated Students	49
Active Duty and Family Members /Guard and Reserve	49
Veterans / GI Bill® Benefit Users.....	50
Veterans Upward Bound.....	50

Military and Veteran Affiliated Students

Centennial Campus • C222 • 719-502-4100

Rampart Range Campus • S102 • 719-502-4500

Fort Carson Education Center • Building 1117 • Room 117 • 719-502-4200

Peterson AFB Education Center • Building 1141 • Room 112 • 719-502-4300

Shriver and USAFA • contact our Peterson AFB office to schedule an appointment on site

Website: ppcc.edu/military

Email: mvp@ppcc.edu

PPCC's Department of Military & Veterans Programs is here to serve our active duty, veterans, and family members in supporting your educational goals. We recognize that unlike traditional students your military commitments and educational benefits can create extra challenges for you to navigate while pursuing your education. Pikes Peak Community College is a proud participant in the Department of Defense Memorandum of Understanding, approved for veteran education benefits, as well as being recognized as both Military Friendly and Best for Vets. We are passionate about providing resources and services designed to foster student success. Our staff members are active in both state and national organizations committed to providing best practices for military and veteran students.

For all military and veteran students:

- Resources for educational and community support while attending college
- Programming and activities to help with academic success
- Networking opportunities
- Academic Advisors that understand the requirements of your military education funding.
- Military and Veterans Programs staff that understand college, VA and DOD processes and can assist mitigating conflicts due to military duty..

Active Duty, veterans and eligible family members who indicate their military status and/or military affiliation on the PPCC application will receive Resident Tuition rates based upon their response. Military and Veteran affiliated students who did not select yes to military veteran status on their application can submit an application for instate tuition classification at <https://www.ppcc.edu/military/instate-tuition>.

Active Duty and Family Members /Guard and Reserve

For your convenience we have college offices located at both Fort Carson and Peterson AFB Education Centers, providing you an all but one-stop shop to get started at PPCC. USAFA and Schriever AFB are by appointment only.

- Application, Advising, Placement Testing, Registration, Residency (In State Tuition), and other college services
- Military Residency for Instate Rates
- Tuition Assistance– GoArmyEd, Air Force Portal, and other branches of service TA
- Colorado National Guard Tuition Assistance
- MyCAA—My Career Advancement Account funding for eligible spouses. Request your Education & Training Plan at www.ppcc.edu/military/mycaa
- CLEP and DSST Testing
- Joint Service Transcript Evaluation (active duty)—Prior Learning Assessment (PLA)
- Student Agreement/Evaluated Degree Plan preparation
- On post, on base General Education classes offered in shorter terms and/or hybrid formats to meet your scheduling demands; no student or course fees for on post/base classes.
- Liaison with instructional divisions if experiencing a military related conflict
- Automatic evaluation of Joint Services Transcripts when you request Tuition Assistance or Certification for Veterans Education Benefits—JSTs will be evaluated for credits that apply to your current declared major.

Getting Started using your Tuition Assistance:

- The Department of Defense requires all active duty to meet with their Education Service Officer/Military Counselor prior to enrolling. Contact your Education Center for the mandatory briefing.
- Stop by our office on post/base to become a PPCC student
- Register for PPCC classes. If you need developmental courses, you must take a placement test to justify the courses for Tuition Assistance. More information available at www.ppcc.edu/placement.
- Visit the TRIO office on Fort Carson for help filling out your FAFSA (Free Application for Federal Student Aid) with experts on military income (required for PELL Grants and other Financial Aid).
- Request Tuition Assistance—Note at this time Tuition Assistance covers the tuition cost per credit hour but does not cover any mandatory fees or textbooks.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at <http://www.benefits.va.gov/gjbill>.

Veterans / GI Bill® Benefit Users

Centennial Campus • C222 • 719-502-4100
Rampart Range Campus • S102 • 719-502-4500
mvp@ppcc.edu

Limited Staff availability at Fort Carson and Peterson

Veteran/GI Bill® Benefit User Briefing

All students intending to use their GI Bill® benefits for the first time at PPCC must attend a briefing session that addresses how to maximize their benefits, what is funded, what is not funded, and the steps required to use their benefits at PPCC. Additionally, the briefing will provide campus and community resources for veterans and their dependents to support a successful academic experience. Failing to attend the briefing will delay PPCC submitting your enrollment to the VA for payment. Briefing schedules and registration are available on our website at ppcc.edu/military/briefing.

Services Available

- Assistance with applying for benefits
- School Certifying Officials (PPCC employees who are your liaison to the Veterans Administration)
- Academic Advising specifically addressing GI Bill® requirements
- Peer Mentoring
- Student Veteran Organizations
- Textbook Lending Library
- Veterans Upward Bound/TRIO Support
- Transition Support—Veteran Success Coordinator
- Programming, activities, and networking opportunities
- Veterans Upward Bound—academic prep and college support
- VA Work Study employment opportunities

Getting Started Using your GI Bill®

- Apply for your GI Bill® Benefits
- Attend an orientation for GI Bill® users
- Apply to PPCC and follow checklist for new students

Get Chapter Specific Checklist at
ppcc.edu/military/benefits

- Apply for your GI Bill® Benefits with the VA (www.va.gov/education/how-to-apply/)
- Attend a mandatory briefing for GI Bill® first time users at PPCC (ppcc.edu/military/briefing)
- Apply to PPCC and follow checklist for new students; Get VA Education Benefit – Chapter Specific Checklist at ppcc.edu/military/benefits
- Request certification to the VA of your classes at PPCC (ppcc.edu/military/crf)
- Enroll in classes. Reminder: If you need developmental courses, you must take a placement test to justify the courses for Veteran Education benefits. More information available at www.ppcc.edu/placement.
- Monitor your student email for School Certifying Official communication

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at <http://www.benefits.va.gov/gibill>.

Veterans Upward Bound

Centennial Campus • C222 • 719-502-4545
mvp@ppcc.edu

Veteran/GI Bill® Benefit User Orientation

The Veterans Upward Bound (VUB) program offers free classes and advising to qualified veterans and active duty military members. The classes offered are English, math, Spanish, basic science, computer skills and career counseling. All class materials are provided by VUB.

VUB staff members can provide assistance for financial aid, scholarships, and admission applications. Emphasis is on low-income and first-generation students.

VUB classes do not count for college credit but prepare the student for college. The free English and math classes can be taken in lieu of remedial classes at PPCC to assist students in their basic skills. Classes may be repeated as often as needed.

EDUCATIONAL PROGRAMS

In This Section

Degree and Certificate Criteria.....	51
Degree Eligibility.....	51
College Preparatory Programs.....	52
Online Learning/eLearning Options.....	52
Prior Learning Assessment (PLA).....	53
Independent Study Courses.....	53
Service Learning Program.....	53
Evening College.....	53
Weekend College.....	53
Options for Current High School Students.....	54

Degree and Certificate Criteria

Associate of Arts Degrees (AA) can be found on page 55.

Associate of Science Degrees (AS) can be found on page 85.

- **AA/AS Degrees with Designation - A Statewide Transfer Articulation Agreement, known as a Degree with Designation (DwD) in the Colorado community college system, is an agreement among Colorado community colleges and four-year colleges/universities. These agreements allow you to graduate from a community college with a 60 credit Associate of Arts (A.A.) or Associate of Science (A.S.) degree with designation, such as an Associate of Arts in Business; enroll with junior status at a university; and complete the bachelor's degree in no more than an additional 60 credits (for a total of 120 credits) unless the Colorado Commission on Higher Education has approved an exception. If you attend full-time (15 credits per semester), do not need developmental courses, and follow the structured schedule, you can complete your bachelor's degree in four years.**
- **AA/AS Without Designation - These are the following degree programs that are not included under the state articulation agreements. When you finish these programs, the degree will read Associate of Arts/Science without the "in a discipline" designation. These degrees are still covered under institutional agreements between a community college and a four-year college/university. However, check with your academic or faculty advisor discuss the transfer options. Disciplines without degrees with designation include: Computer Science, Dance, Environmental Studies, World Language, Humanities, Journalism, Professional Writing, Social Work Transfer.**

Associate of General Studies Degree (AGS) allows maximum flexibility to mix career and transfer courses with options for possible transferability. Some credits may not transfer and is not approved for 60/60 articulation.

Associate of Applied Sciences Degrees (AAS) and Certificate programs are designed for entry to the workforce. These also include Career and Technical Education.

Bachelor Applied Science Degree (BAS) is the designated degree for flexible baccalaureate programs that are designed to accommodate the unique demands for entry and advancement within specific workforce sectors. BAS programs provide degree completion opportunities for students from a variety of educational backgrounds, but primarily those with Associate of Applied Science (AAS) degrees or the equivalent.

BAS degrees typically build on the curriculum requirements for an AAS degree. As such, BAS degrees are often considered to be stackable degrees, meaning that all of the requirements for the AAS degree are either included in, or receive full recognition and credit within the BAS program requirements. Consequently, both the technical and general education courses completed in an AAS degree count fully toward BAS degree requirements.

Because the general education requirements often vary considerably for AAS degrees due to the targeted focus of their career and technical fields, PPCC provides great flexibility to faculty in structuring AAS degree general education requirements. It is the intent of the general education philosophy for BAS degrees that all general education courses successfully completed by students in their AAS degrees count fully toward the overall BAS general education requirements.

The Bachelor of Applied Science degree is designed to provide a four-year degree in a true 2+2 manner for students who already have an Associate of Applied Science degree and are ready to take on more technical responsibility. This is a popular option for workforce development and advancement. This degree provides students with an academic training to further their careers.

Each BAS completion degree will have 120 credit hours. Thirty of these credits must be taken in residence at PPCC per the Higher Learning Commission (HLC) accreditation requirements. Admission criteria may change depending on the degree and academic advising is key to understanding the requirements for admission.

Prerequisites: Completion of an Associate of Applied Science (AAS) degree in the appropriate field of study.

GT Pathways courses, in which the student earns a C- or higher, will always transfer and apply to GT Pathways requirements in AA, AS and most bachelor's degrees at every public Colorado college and university. GT Pathways does not apply to some degrees. You should always seek advising from the appropriate advisor at the college or university you plan to attend to ensure you are selecting the appropriate coursework for your degree and that it will apply to those degree requirements.

Degree Eligibility

Students who receive an AGS degree may subsequently pursue an AA, AS or AAS degree. If they have received an AAS degree, they may pursue an AA, AS or AGS degree. However, students who have completed the degree requirements for an AA or AS degree from PPCC may not then also apply for an AGS degree.

PPCC will accept 45 applicable credits toward a second degree or certificate.

Having earned an associate or higher academic degree from an accredited school generally disqualifies students from receiving an associate degree from PPCC in an identical or closely related program. However, students may appeal this decision.

College Preparatory Programs

Purpose and Goals

In order to maximize student success, PPCC provides college prep courses so students can be assured they are prepared to begin their course of study. Students enroll in college prep courses in mathematics, English, and study skills (Advancing Academic Achievement courses) as prerequisites for college courses as well as for personal enrichment. Research indicates that students who need and take these courses do better in their college-level courses than they would have without them.

Students who place into college prep courses in mathematics and/or English must complete college prep courses within the first 30 semester credit hours. Students who have not completed college prep courses and have completed 30 or more semester credit hours must meet with an academic advisor before registering for additional coursework. Refer to Getting Started / Advising & Testing to speak with an academic advisor.

Advancing Academic Achievement

For students who have concerns about meeting the challenges of college academic requirements or for students who want to improve the study skills they may have learned in previous educational settings, Pikes Peak Community College provides the Academic Achievement Program. Courses in this program are designed to help students develop personalized learning strategies in the areas of time management, goal setting, note-taking, test-taking, textbook reading, memory development, and critical thinking. Students are encouraged to enroll in the appropriate study skills course prior to starting their degree or certificate programs.

AAA 109 Advanced Academic Achievement

For further information about the AAA 109, please call 719-502-3600.

English Preparatory Program

College Preparatory English courses cover basic writing and grammar. These courses are a good refresher for students who have not written college reports or essays. The writing courses help students to express their thoughts in complete sentences, organized paragraphs, and whole compositions.

CCR 094 Studio 121

Mathematics Preparatory Program

College preparatory mathematics courses prepare students for college-level mathematics courses or entry into many occupational programs. Enrollment is based on the math pathway needed for a student's desired degree program.

MAT 055 Algebraic Literacy

English as a Second Language Preparatory Program

Centennial Campus • F-200 • 719-502-3535

English as a Second Language (ESL) is located at the Centennial Campus. It is a semi-intensive program, designed to meet the needs of non-native English speakers. ESL serves students who wish to improve their English reading, writing, and speaking skills. Many ESL students plan to attend an American college or university or need to improve their English skills for the workplace.

Any student who is interested in taking ESL courses must take the ESL placement exam. Non-native speakers of English who cannot demonstrate College Reading & Writing Literacy should take the ESL placement exam and be advised by an ESL advisor.

English as a Second Language has three levels of study: basic, intermediate, and advanced. ESL courses include grammar, pronunciation, composition, reading, and listening/speaking. Full-time students may complete coursework in ESL in three semesters.

For more information about English as a Second Language at Pikes Peak Community College, visit our website at www.ppcc.edu/esl or call 719-502-3535.

Basic Level

ESL 021	Basic Grammar	5
ESL 031	Basic Listening & Speaking	4
ESL 041	Basic Reading	4
		<hr/> 13

Intermediate Level

ESL 022	Intermediate Grammar	5
ESL 032	Intermediate Listening & Speaking	4
	or	
ESL 042	Intermediate Reading	(4)
ESL 052	Intermediate Composition	4
		<hr/> 13

Advanced Level

ESL 023	Advanced Grammar	5
ESL 043	Advanced Reading	4
ESL 053	Advanced Composition	4
		<hr/> 13

Additional electives can be taken at any time after Basic Level. These electives do not count toward level completion in English as a Second Language.

ESL 011	Basic Pronunciation	3
ESL 012	Intermediate Pronunciation	3
ESL 054	ESL Reading and Composition Foundations	5

ESL students who have completed all three Advanced Level ESL courses and plan to continue enrollment in college level courses at PPCC should complete ESL 054 ESL Reading and Composition before enrolling in ENG 121 English Composition I: CO1.

Online Learning/eLearning Options

PPCC offers a variety of non-traditional learning options for students who cannot or do not wish to take courses in a traditional classroom setting. The eLearning alternatives include a wide variety of fully online and hybrid (part online/part classroom) classes. Go to www.ppcc.edu/academics/eLearning to review the options for online learning from home or work. All PPCC online courses are conducted within normal term dates, with fixed deadlines for assignments and tests.

PPCC Hybrid Classes (Sections 1H1, 2H1, 3H1, etc.)

Hybrid, or blended, classes combine on-campus class sessions with Internet-based course work. In most cases students will meet once a week for lecture, hands-on learning, and face-to-face group activities. Remaining assignments will be completed online. Students can access online activities and assignments from any computer connected to the Internet, including those in campus computer labs.

PPCC Online Campus (Sections 1N1, 2N1, 3N1, etc.)

Courses may be taken using home computers to communicate electronically with faculty and other students online in the "virtual classroom." Students may also use the computers at PPCC in the instructional computer labs to connect to the Internet for online courses.

CCCOnline (Sections C11, C21)

Courses are offered through a consortium of 13 community colleges in Colorado. Students will register as a PPCC student, but an instructor may teach the classes from any of the 13 schools. Check the website for complete information. Students may also apply appropriate CCCOnline classes toward degrees at PPCC. For more information go to www.cconline.org.

Online and alternative delivery classes meet the same course outcomes as their traditional counterparts and are subject to the same transfer agreements. In addition, there are transfer agreements with colleges both in-state and out-of-state that offer Baccalaureate completion programs using distance/electronic technology.

For more information, please call 719-502-3555 or (800) 456-6847 or e-mail to eLearning@ppcc.edu.

Students on active military duty, please call 719-502-4200 or e-mail mvp@ppcc.edu.

Hyflex Classes

The course meets on a designated campus/room (in-person). Students may opt to attend the course on-campus, AND/OR via a remote synchronous (instruction delivered in real time online) platform OR online only.

Live Remote Classes

These classes meet online with a live remote (online in real time) component. The live remote component of the class will be scheduled for 25% or more of the time spent in the course. Students should plan to be online in the 'virtual' classroom during the designated days/times the class is scheduled to meet.

Prior Learning Assessment (PLA)

Students may earn credit for learning outside the classroom. Prior Learning Assessment must apply to a degree or certificate goal. Credit is given for the following:

- portfolio: learning through experiences such as reading and study, work, and on-the-job training or special classes
- standardized testing: a satisfactory score on nationally accepted tests such as CLEP and DSST
- published guide: learning given in a nontraditional setting such as a military or industry classroom which must be evaluated in a published guide by a nationally known organization such as the American Council on Education (ACE)

PPCC evaluates prior learning through the Prior Learning Assessment program (PLA). Students may receive up to 75 percent of their total credits for all types of prior learning. For more information, stop by the Student Services Center at the Centennial Campus, or call 719-502-3000. Military and Veteran students, contact Department of Military & Veterans Programs at 719-502-4100.

Students who wish to receive credit for prior learning and plan to transfer to another college or university should verify these credits

will transfer. Policies on awarding transfer credit vary from school to school.

Independent Study Courses

Extended learning options may be offered for students who cannot come to the PPCC campus or cannot attend courses that are scheduled for a standard semester. Learning options available for both regular curriculum and special contract programs include independent study.

College credit is awarded for these courses.

Students receiving financial aid are cautioned to contact the Student Services Centers when registering for independent study courses.

Service Learning Program

Service Learning is a teaching and learning strategy that integrates meaningful community service with course content and reflection to enrich the learning experience, teach social and civic responsibility and strengthen communities. Service learning is fully integrated into the formal academic course. For additional information and to see a current list of classes offered, visit www.ppcc.edu/High-Impact-Learning/service-learning-courses.

Evening College

It is possible to earn an Associate of Arts degree at Pikes Peak Community College in two years by attending college in the evenings Monday through Thursday along with taking one online class per semester during regular semesters and taking online classes in the summer.

PPCC's Evening College at the Downtown Studio Campus offers a variety of classes for the student who wants to earn an Associate of Arts degree but can only attend in the evenings or for the student who just wants to pick up an extra class or two. Classes are offered Monday through Thursday evenings starting at 5:30 pm.

The Evening College experience can also be enhanced with online classes. Online and Hybrid offerings, blended classes that allow you the flexibility of combining a traditional classroom experience with online learning, are a perfect complement to the Evening College.

The gold standard for transfers is having a Degree with Designation; for more information about Degrees with Designation go to: <https://catalog.ppcc.edu/content.php?catoid=2&navoid=55>.

Students who want to pursue some Degrees with Designation can take online classes to fulfill those requirements.

For more information, call 719-502-3000.

Weekend College

It is possible to earn an Associate of Arts degree at Pikes Peak Community College in two years by attending college on the weekends along with one online class per semester during regular semesters and taking online classes in the summer.

PPCC Weekend College at the Downtown Studio Campus offers a variety of classes for the student who wants to earn an Associate of Arts degree but can only attend on the weekends or for the student who just wants to pick up an extra class or two. Classes

are offered Fridays in the evening, Saturdays throughout the day and one Sunday class.

PPCC Weekend College at the Rampart Range Campus offers a variety of classes for the student who wants to earn an Associate of Arts degree but can only attend on the weekends or for the student who just wants to pick up an extra class or two. Classes are offered Fridays throughout the day and Saturdays throughout the day.

The Weekend College experience can also be enhanced with online classes. Online and Hybrid offerings, blended classes that allow you the flexibility of combining a traditional classroom experience with online learning, are a perfect complement to the Weekend College.

The gold standard for transfers is having a Degree with Designation; for more information about Degrees with Designation go to: <https://catalog.ppcc.edu/content.php?catoid=2&navoid=55>.

Students who want to pursue some Degrees with Designation can take online classes to fulfill those requirements.

For more information, call 719-502-3000.

Options for Current High School Students

Centennial Campus • A-220 • 719-502-3111

Career Start

High school students may enroll in PPCC Career Start, which provides career and technical training in the program areas listed below. This concurrent enrollment cohort program enrolls students into PPCC courses applicable to career pathway for college and high school credit.

Occupational Programs Available

- Auto Collision Technology
- Automotive Service Technology
- Construction
- Criminal Justice
- Culinary Arts
- Cyber Security
- Diesel Power Technology
- Early Childhood Education
- Fire Science Technology
- Health Career Exploration
- Health Science Technology
- Interior Design
- Multimedia Graphic Design
- Radio and Television
- Welding
- Zoo Keeping

Students enroll in the Career Start as part of their daily high school schedule. School districts under contract pay the costs of this program. The Career Start Program delivers career and technical education that provides each student with the concepts, academic and technical competencies, career skills, attitudes, and work habits essential to gain entry-level employment following high school graduation.

Instruction is provided in a two hour and forty-minute day, five-day-a-week schedule throughout the school year. Instruction is provided in classrooms, laboratories, and community settings that use equipment similar to that used in business and industry.

Enrollment in Career Start is completed at the high school. Contact your high school counselor or call PPCC High School Programs at 719-502-3111 for more information.

Articulation Agreements

High school students may earn college credits by successfully earning an A or B grade in approved career-technical education courses at their high school. Pikes Peak Community College has articulation agreements with most local school districts. A transcription fee of \$10 per PPCC course is applicable. Articulated courses can apply toward corresponding degrees and certificates at Pikes Peak Community College but are not designated as transfer courses to four-year colleges and universities. For more information, call PPCC High School Programs at 719-502-3111.

Concurrent Enrollment

Concurrent Enrollment (CE) enables high school students to take college classes at PPCC and earn high school and/or college credit. Students have the opportunity to enroll in any courses for which they meet the prerequisites and applicable to students' future career and academic goals. In general, high schools will not pay for College Preparatory courses.

To participate in CE, students must obtain permission from a parent or guardian, high school counselor and/or district administrator and must apply for the College Opportunity Fund (COF). Many school districts have a cooperative agreement with PPCC and may pay for the tuition as well as fees and/or books for qualifying courses. Contact your high school counselor for more specific information. Home-schooled students are also welcome to participate. Contact the High School Programs Office at 719-502-3111 for more information.

High School Student Records

All students attending courses at PPCC are assumed to be independent, and therefore, information is not provided to parents. Students may authorize the release of any data to any person or agency by completing the "Release of Non-Directory Information" form.

For additional information on options available for current high school students, visit www.ppcc.edu/hsp.

DEGREE & PROGRAM REQUIREMENTS

In This Section

Associate of Arts Degrees (AA)	55
Associate of Science Degree (AS)	85
Associate of General Studies Degree (AGS)	93
Associate of Applied Science Degrees (AAS) and Certificates.....	96
Bachelor of Applied Science Course of Study.....	171
Bachelor of Science in Nursing Course of Study	171
Other Programs and Courses of Study.....	173

Associate of Arts Degrees (AA)

The Associate of Arts Degrees and Course of Study are designed for students who want a traditional liberal arts education and who intend to transfer to a four-year college or university. They provide a basis of study in the areas of arts and humanities, communication, or social sciences.

Pikes Peak Community College partners with other Colorado community colleges and four-year universities to guarantee transfer of the Associate of Arts degrees and Course of Study. Adherence to the Colorado Community College System 60+60 Bachelor's Transfer Program guarantees that at least 60 hours will transfer completely, upon admission, to a Bachelor of Arts major in Colorado's public four-year institutions, where students are guaranteed to be able to finish the Bachelor of Arts degree with an additional 60 credit hours of study. Receiving institutions will accept all applicable credits earned within ten years of transfer to the receiving institution. Credits earned over ten years will be evaluated on a course-by-course basis.

In addition to the Course of Study, Pikes Peak Community College participates in a statewide articulation agreement for the guaranteed transfer of an Associate of Art in Business, Elementary Teacher Education, and Early Childhood Teacher Education. Students should review the degree requirements of the four-year university of interest and work with their PPCC faculty advisor to ensure a smooth transfer.

To earn an Associate of Arts Degree, students must complete Colorado Community College System 60+60 Bachelor's Transfer Program outlined below. The course requirements total 60 semester credit hours, at least 35 of which must be Colorado State-Guaranteed Courses, and students must earn a C or better in each class.

Courses marked with an asterisk [] are not currently offered at PPCC.*

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Oral Communication

Three (3) credit hours

COM 115	Public Speaking	3
or		
COM 125	Interpersonal Communication	(3)
or		
COM 220	Intercultural Communication: SS3	(3)

Mathematics

Three (3) credit hours GT Pathways Mathematics course (MA1)

GT-MA1:	MAT 120, MAT 121, MAT 122, MAT 123, MAT 125, MAT 135, MAT 166, MAT 201, MAT 202, MAT 203, MAT 204, MAT 215, MAT 261*, MAT 265
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Arts and Humanities / Social and Behavioral Sciences

Fifteen (15) credit hours

Two GT Pathways Arts and Humanities courses from two different areas (AH1, AH2, AH3, AH4)

Two GT Pathways Social and Behavioral Sciences courses from two different areas (SS1, SS2, SS3)

One additional GT Pathways course from Arts and Humanities or Social and Behavioral Sciences (AH1, AH2, AH3, AH4, SS1, SS2, SS3)

GT-AH1:	ART 110, ART 111, ART 112, ART 207, DAN 125, MUS 120, MUS 121, MUS 122, MUS 123, MUS 125, THE 105, THE 108, THE 211, THE 212, THE 215
GT-AH2:	HUM 103, HUM 115, HUM 121, HUM 122, HUM 123, LIT 115, LIT 201, LIT 202, LIT 205, LIT 211, LIT 212, LIT 221, LIT 222, LIT 225, LIT 246, LIT 259*, LIT 268
GT-AH3:	PHI 111, PHI 112, PHI 113, PHI 114, PHI 115, PHI 116, PHI 205, PHI 214, PHI 218, PHI 220*
GT-AH4:	FRE 211, FRE 212, GER 211, GER 212, ITA 211, ITA 212, JPN 211, JPN 212, RUS 211, RUS 212, SPA 211, SPA 212
GT-SS1:	AGE 102*, ECO 101*, ECO 201, ECO 202, ECO 211*, ECO 245, POS 105, POS 111, POS 125, POS 205, POS 215, POS 225
GT-SS2:	GEO 105, GEO 106
GT-SS3:	AGR 260*, ANT 101, ANT 102*, ANT 107, ANT 108*, ANT 215, ANT 225, ANT 250, COM 220, CRJ 110, ETH 200, JOU 105, PSY 101, PSY 102, PSY 205, PSY 217, PSY 226, PSY 227, PSY 231*, PSY 235, PSY 238, PSY 240*, PSY 249, PSY 265, SOC 101, SOC 102, SOC 205, SOC 216, SOC 218, SOC 220, SOC 231, SOC 237, WST 200, WST 225, WST 240*, WST 249*

History

Three (3) credit hours GT Pathways History course (HI1)

GT-HI1:	HIS 101, HIS 102, HIS 111, HIS 112, HIS 121, HIS 122, HIS 203, HIS 205, HIS 207, HIS 208, HIS 215, HIS 218, HIS 225, HIS 235, HIS 236, HIS 243, HIS 244, HIS 245*, HIS 246*, HIS 247, HIS 249, HIS 250, HIS 251, HIS 255, HIS 259
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Natural and Physical Sciences

Seven (7) credit hours GT Pathways Natural and Physical Sciences courses (SC1, SC2), including at least one (1) lab course (SC1, SC2).

GT-SC1:	AGY 240, ANT 111, ANT 212, AST 101, AST 102, BIO 104, BIO 105, BIO 111, BIO 112, BIO 201, BIO 202, BIO 204, BIO 208*, BIO 221, BIO 224, CHE 101, CHE 102, CHE 105, CHE 111, CHE 112, ENV 101, GEO 111, GEO 112, GEY 111, GEY 112, GEY 135, GEY 216*, MET 150, PHY 105, PHY 107*, PHY 111, PHY 112, PHY 211, PHY 212, SCI 155, SCI 156
GT-SC2:	AST 155, BIO 103, BIO 116*, ENV 110, GEY 108, SCI 105*

Electives

Twenty-three (23) credit hours selected from the AA approved course list. Can be found on page 56.

Total Credit Hours **60**

Other Requirements

1. A minimum of 60 credit hours in a prescribed program of study with a cumulative grade point average of 2.0 (a C average). At least 15 of these credit hours must be earned from PPCC.
2. Only six (6) elective credits are allowed in any combination of PED courses.
3. Students may concentrate their study in a specialized area such as communication, journalism, or political science. Many "Course of Study" are included in the next section of this catalog.
4. Career and technical courses, whether taken at another institution or at PPCC, are not accepted toward this degree without approval of the Vice President for Instructional Services. Approval is given only when it is appropriate to the educational objectives of a student.
5. Courses numbered below 100 do not apply toward degrees.

World Language Note: It is advisable to verify the world language admissions requirements for the university/four-year college you are planning to attend. For example, many of the Colorado four-year institutions require world languages for admission; the CU system requires 2-3 years of high school world language (or equivalent 2-3 semesters at Pikes Peak Community College). Students planning to attend a Colorado four-year institution who do not have the prerequisite world language requirement from high school should consider enrolling in these courses in addition to the degree requirements.

Approved Elective Course List for AA Degrees and Course of Study

These courses are guaranteed to transfer as part of the 60+60 Bachelor's Degree Transfer Program. State-wide and individual college transfer agreements prescribe electives which transfer as part of those programs. Students who transfer prior to completing the AA degree are responsible for checking transfer of individual courses with the receiving four-year institution.

Written Communication

COM 115	Public Speaking	3
COM 125	Interpersonal Communication	3
COM 216	Advanced Public Speaking	3
COM 217	Group Communication	3
COM 220	Intercultural Communication: SS3	3
COM 225	Organizational Communication	3
ENG 115	Technical English & Communication	3
ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
ENG 131	Technical Writing I: CO1	3

ENG 132	Technical Writing II	3
ENG 201	English Composition III: CO3	3
ENG 205	Technical Editing	3
ENG 221	Creative Writing I: AH1	3
ENG 222	Creative Writing II	3
ENG 226	Fiction Writing	3
ENG 227	Poetry Writing	3
ENG 230	Creative Nonfiction	3
ENG 231	Literary Magazine	3
ENG 235	Rhetoric & Propaganda	3
HIS 265	Writing About History: CO3	3
JOU 105	Introduction to Mass Media: SS3	3
JOU 106	Media News & Reporting	3
JOU 111	Principles of Advertising	3
JOU 114	TV Production	3
JOU 121	Photojournalism	3
JOU 206	Intermediate Newswriting & Editing	3
JOU 215	Publications Production & Design	3
JOU 221	Newspaper Design I	3
JOU 225	New Media	3
JOU 231	Introduction to Public Relations	4
JOU 241	Feature & Magazine Writing	3

Arts and Humanities

ARA 111	Arabic Language I	5
ARA 112	Arabic Language II	5
ARA 211	Arabic Language III	3
ARA 212	Arabic Language IV	3
ART 110	Art Appreciation: AH1	3
ART 111	Art History Ancient to Medieval: AH1	3
ART 112	Art History Renaissance to 1900: AH1	3
ART 113	History of Photography	3
ART 114	Art Sampler	1
ART 115	Stained Glass I	3
ART 116	Stained Glass II	3
ART 117	Fiber Design I	3
ART 118	Weaving Techniques Southwest I	3
ART 119	Weaving Techniques Southwest II	3
ART 121	Drawing I	3
ART 122	Drawing for the Graphic Novel	3
ART 124	Watercolor I	3
ART 127	Landscape Drawing I	3
ART 128	Figure Drawing I	3
ART 129	Printmaking I	3
ART 131	Visual Concepts 2-D Design	3
ART 132	Visual Concepts 3-D Design	3
ART 133	Jewelry & Metalwork I	3
ART 137	Enameling on Metal I	3
ART 138	Film Photography I	3
ART 139	Digital Photography I	3
ART 142	Landscape Photography	3
ART 144	Portrait Photography	3
ART 149	Mixed Media I: Digital Arts	3
ART 150	Digital Art Foundations I	3
ART 151	Painting I	3
ART 152	Landscape Painting	3
ART 153	Pastel Painting	3
ART 154	Figure Painting I	3
ART 155	Portraiture	3
ART 161	Ceramics I	3
ART 162	Handbuilt Clay I	3
ART 163	Handbuilt Clay II	3
ART 164	Handbuilt Clay III	3
ART 165	Sculpture I	3
ART 166	Raku	3
ART 167	Sculpting the Figure	3
ART 207	Art History 1900 to Present: AH1	3
ART 208	Culture Studies	3
ART 209	Studio Art	3
ART 210	Marketing for Visual Arts	3

ART 211	Business of Visual Art	3	DAN 161	African Dance I	1
ART 215	Stained Glass III	3	DAN 211	Dance Composition & Improvisation I	3
ART 216	Stained Glass IV	3	DAN 221	Dance Performance I	2
ART 217	Fiber Design II	3	DAN 222	Dance Performance II	2
ART 218	Weaving Techniques Southwest III	3	DAN 224	Dance for Musical Theatre I	3
ART 219	Weaving Techniques Southwest IV	3	DAN 225	Dance for Musical Theatre II	3
ART 221	Drawing II	3	DAN 226	Pointe	1
ART 222	Drawing III	3	DAN 227	Pointe II	1
ART 223	Drawing IV	3	DAN 251	Belly Dance III	1
ART 224	Watercolor II	3	DAN 253	Belly Dance Performance I	1
ART 225	Watercolor III	3	DAN 254	Methods of Teaching Dance	2
ART 226	Watercolor IV	3	DAN 255	Dance for Camera	2
ART 227	Landscape Drawing II	3	FRE 101	Conversational French I	3
ART 228	Advanced Figure Drawing	3	FRE 111	French Language I	5
ART 229	Printmaking II	3	FRE 112	French Language II	5
ART 230	Color Theory	3	FRE 211	French Language III: AH4	3
ART 232	Advanced Visual Concepts 3-D Design	3	FRE 212	French Language IV: AH4	3
ART 233	Jewelry & Metalwork II	3	GER 111	German Language I	5
ART 234	Jewelry and Metalwork III	3	GER 112	German Language II	5
ART 235	Jewelry and Metalwork IV	3	GER 211	German Language III: AH4	3
ART 237	Enameling on Metal II	3	GER 212	German Language IV: AH4	3
ART 238	Film Photography II	3	HUM 103	Introduction to Film Art: AH2	3
ART 239	Digital Photography II	3	HUM 115	World Mythology: AH2	3
ART 242	Alternative Photo Processes	3	HUM 121	Early Civilization: AH2	3
ART 249	Mixed Media II: Digital Art	3	HUM 122	Medieval - Modern: AH2	3
ART 250	Digital Art Foundations II	3	HUM 123	Modern World: AH2	3
ART 251	Painting II	3	HUM 131	The Arts & Cultures of Mexico	3
ART 252	Painting III	3	HUM 163	Film Criticism	3
ART 253	Painting IV	3	HUM 201	Twentieth Century American Arts	3
ART 254	Advanced Figure Painting	3	HUM 236	North American Indian Arts	3
ART 256	Mixed Media Painting	3	HUM 237	Hispanic Arts of the American Southwest	3
ART 261	Ceramics II	3	HUM 238	Sacred Images, Sacred Spaces: Southwestern U.S.	3
ART 262	Ceramics III	3	HUM 241	Asian Arts & Cultures	3
ART 263	Ceramics IV	3	ITA 101	Conversational Italian I	3
ART 265	Sculpture II	3	ITA 111	Italian Language I	5
ART 289	Capstone	1-6	ITA 112	Italian Language II	5
ASL 121	American Sign Language I	5	ITA 211	Italian Language III: AH4	3
ASL 122	American Sign Language II	5	ITA 212	Italian Language IV: AH4	3
ASL 123	American Sign Language III	5	JPN 101	Conversational Japanese I	3
ASL 125	Fingerspelling	3	JPN 111	Japanese Language I	5
ASL 135	Conversational ASL	2	JPN 112	Japanese Language II	5
ASL 215	ASL Literature	3	JPN 211	Japanese Language III: AH4	3
ASL 221	American Sign Language IV: AH4	3	JPN 212	Japanese Language IV: AH4	3
ASL 222	American Sign Language V: AH4	3	LIT 115	Introduction to Literature I: AH2	3
CHI 111	Chinese Language I	5	LIT 121	Survey of World Mythology	3
DAN 105	Hip Hop Dance I	1	LIT 201	World Literature to 1600: AH2	3
DAN 106	Hip Hop Dance II	1	LIT 202	World Literature after 1600: AH2	3
DAN 111	Modern Dance I	1	LIT 205	Ethnic Literature: AH2	3
DAN 112	Modern Dance II	2	LIT 211	American Literature to Civil War: AH2	3
DAN 113	Modern Dance III	2	LIT 212	American Literature after the Civil War: AH2	3
DAN 114	Modern Dance IV	2	LIT 221	British Literature to 1770: AH2	3
DAN 117	Salsa I	1	LIT 222	British Literature since 1770: AH2	3
DAN 121	Jazz I	1	LIT 225	Introduction to Shakespeare: AH2	3
DAN 122	Jazz II	2	LIT 235	Science Fiction	3
DAN 123	Jazz III	2	LIT 246	Literature of Women: AH2	3
DAN 124	Jazz IV	2	LIT 248	Native American Literature	3
DAN 125	History of Dance I: AH1	3	LIT 255	Children's Literature: AH2	3
DAN 129	Introduction to Dance	1	LIT 257	Literature & Film	3
DAN 130	Dance Sampler	1	LIT 258	Latinx Literature	3
DAN 131	Ballet I	1	LIT 268	Celtic Literature: AH2	3
DAN 132	Ballet II	2	LIT 269	Popular Literature & Culture	3
DAN 133	Ballet III	2	MUS 100	Music Theory Fundamentals I	3
DAN 134	Ballet IV	2	MUS 101	Music Theory Fundamentals II	3
DAN 141	Ballroom Dance	1	MUS 105	Introduction to Computer Applications	3
DAN 142	Ballroom Dance II	1	MUS 110	Music Theory I	3
DAN 143	Tap I	1	MUS 111	Music Theory II	3
DAN 144	Tap II	1	MUS 112	Ear Training/Sight-singing I Lab	1
DAN 151	Belly Dance I	1	MUS 113	Ear Training/Sight-singing II Lab	1
DAN 152	Belly Dance II	1	MUS 120	Music Appreciation: AH1	3

MUS 121	Music History Medieval thru Classical: AH1	3	SPA 262	Composition for the Heritage Language Speaker	3
MUS 122	Music History Early Romantic Period to the Present: AH1	3	THE 104	Basic Costume & Apparel Construction	3
MUS 123	Survey of World Music: AH1	3	THE 105	Theatre Appreciation: AH1	5
MUS 125	History of Jazz: AH1	3	THE 111	Acting I	3
MUS 126	History of Rock & Pop	3	THE 112	Acting II	3
MUS 131	Music Class I	2	THE 115	Stage Movement for Actors	3
MUS 132	Music Class II	2	THE 116	Technical Theatre	3
MUS 133	Music Class III	2	THE 126	Auditioning for Musical Theater	3
MUS 134	Music Class IV	2	THE 131	Theatre Production I	3
MUS 141	Private Instruction	1	THE 132	Theatre Production II	3
MUS 142	Private Instruction	1	THE 135	Stage Makeup I	3
MUS 143	Private Instruction	1	THE 136	Stage Makeup II	3
MUS 144	Private Instruction	1	THE 140	Stage Dialects	1
MUS 151	Ensemble I	1	THE 144	Scene Study	1
MUS 152	Ensemble II	1	THE 152	Production Stage Management I	3
MUS 153	Ensemble III	1	THE 183	Internship	1-3
MUS 154	Ensemble IV	1	THE 204	Voice & Articulation I	2
MUS 167	Music Business I	3	THE 211	Development of Theatre Greek-Renaissance: AH1	3
MUS 210	Music Theory III	3	THE 212	Development of Theatre Restoration to Modern: AH1	3
MUS 211	Music Theory IV	3	THE 213	Intermediate Acting I	3
MUS 212	Ear Training/Sight-Singing Lab III	1	THE 215	Playwriting: AH1	3
MUS 213	Ear Training/Sight-Singing Lab IV	1	THE 216	Theatre Lighting & Design	3
MUS 232	Music Class II	2	THE 220	Directing I	3
MUS 233	Music Class III	2	THE 231	Theatre Production III	3
MUS 234	Music Class IV	2	THE 232	Theatre Production IV	3
MUS 241	Private Instruction	2	THE 246	Rehearsal & Performance	1
MUS 242	Private Instruction	2	THE 247	Rehearsal & Performance II	2
MUS 243	Private Instruction	2	THE 248	Rehearsal & Performance III	3
MUS 244	Private Instruction	2	THE 255	Intermediate Playwriting	3
MUS 251	Ensemble I	1	History		
MUS 252	Ensemble II	1	HIS 101	Western Civilization: Antiquity-1650: HI1	3
MUS 253	Ensemble III	1	HIS 102	Western Civilization: 1650-Present: HI1	3
MUS 254	Ensemble IV	1	HIS 111	The World: Antiquity-1650: HI1	3
PHI 111	Introduction to Philosophy: AH3	3	HIS 112	The World: 1650-Present: HI1	3
PHI 112	Ethics: AH3	3	HIS 121	U.S. History to Reconstruction: HI1	3
PHI 113	Logic: AH3	3	HIS 122	U.S. History since the Civil War: HI1	3
PHI 114	Comparative Religions: AH3	3	HIS 203	Civil War Era in American History: HI1	3
PHI 115	World Religions-West: AH3	3	HIS 205	Women in World History: HI1	3
PHI 116	World Religions-East: AH3	3	HIS 207	American Environmental History: HI1	3
PHI 142	New Testament	3	HIS 208	American Indian History: HI1	3
PHI 201	Social & Political Philosophy	3	HIS 215	Women in U.S. History: HI1	3
PHI 205	Business Ethics: AH3	3	HIS 218	History of Science & Technology: HI1	3
PHI 214	Philosophy of Religion: AH3	3	HIS 225	Colorado History: HI1	3
PHI 218	Environmental Ethics: AH3	3	HIS 235	History of the American West: HI1	3
PHI 250	Eastern Wisdom	3	HIS 236	U.S. History Since 1945: HI1	3
PHO 101	Professional Photography I	3	HIS 243	History of Modern China: HI1	3
PHO 120	Fundamentals of Photography	3	HIS 244	History of Latin America: HI1	3
PHO 205	Professional Digital Photo I	3	HIS 247	20th Century World History: HI1	3
PHO 226	Digital Workflow Management	3	HIS 249	History of Islamic Civilization: HI1	3
PHO 234	View Camera/Lighting Technique	3	HIS 250	African American History: HI1	3
PHO 258	Wildlife Photography	3	HIS 251	The History of Christianity in the World: HI1	3
RUS 111	Russian Language I	5	HIS 255	The Middle Ages: HI1	3
RUS 112	Russian Language II	5	HIS 259	Modern Middle East: HI1	3
RUS 211	Russian Language III: AH4	3	Mathematics		
RUS 212	Russian Language IV: AH4	3	MAT 120	Mathematics for the Liberal Arts: MA1	4
SPA 101	Conversational Spanish I	3	MAT 121	College Algebra: MA1	4
SPA 102	Conversational Spanish II	3	MAT 122	College Trigonometry: MA1	3
SPA 109	Spanish for Travelers	2	MAT 123	Finite Mathematics: MA1	4
SPA 111	Spanish Language I	5	MAT 125	Survey of Calculus: MA1	4
SPA 112	Spanish Language II	5	MAT 135	Introduction to Statistics: MA1	3
SPA 114	Fast-Track Spanish I & II	5	MAT 155	Integrated Math I: MA1	3
SPA 115	Spanish for the Professional I	3	MAT 156	Integrated Math II: MA1	3
SPA 201	Conversational Spanish III	3	MAT 166	Pre-Calculus: MA1	5
SPA 202	Conversational Spanish IV	3	MAT 201	Calculus I: MA1	5
SPA 211	Spanish Language III: AH4	3	MAT 202	Calculus II: MA1	5
SPA 212	Spanish Language IV: AH4	3	MAT 203	Calculus III: MA1	4
SPA 215	Spanish for the Professional II	3	MAT 204	Calculus III with Engineering Applications: MA1	5
SPA 261	Grammar for the Heritage Language Speaker	3			

MAT 215	Discrete Mathematics: MA1	4	SOC 218	Sociology of Diversity: SS3	3
MAT 255	Linear Algebra	3	SOC 220	Sociology of Religion: SS3	3
MAT 265	Differential Equations: MA1	3	SOC 231	The Sociology of Deviant Behavior: SS3	3
Social and Behavioral Sciences			SOC 237	Sociology of Death & Dying: SS3	3
ANT 101	Cultural Anthropology: SS3	3	WST 200	Introduction to Women's Studies: SS3	3
ANT 107	Introduction to Archaeology: SS3	3	Natural and Physical Sciences		
ANT 207	Human Prehistory	3	AGY 240	Introductory Soil Science: SC1	4
ANT 215	Native Peoples of North America: SS3	3	ANT 111	Biological Anthropology w/Lab: SC1	4
ANT 218	Archaeology of the Bible	3	ANT 212	Introduction to Forensic Anthropology: SC1	4
ANT 221	Exploring Other Cultures I	3	AST 101	Planetary Astronomy w/Lab: SC1	4
ANT 222	Exploring Other Cultures II	3	AST 102	Stellar Astronomy w/Lab: SC1	4
ANT 225	Anthropology of Religion: SS3	3	AST 110	Colorado Night Sky III	1
ANT 250	Medical Anthropology: SS3	3	AST 155	Astronomy of Ancient Cultures: SC2	3
ANT 255	Anthropology of Energy	3	BIO 103	Principles of Animal Biology: SC2	3
ANT 260	Sex, Gender & Culture	3	BIO 104	Biology: A Human Approach: SC1	4
CRJ 110	Introduction to Criminal Justice: SS3	3	BIO 105	Science of Biology w/Lab: SC1	4
CRJ 111	Substantive Criminal Law	3	BIO 106	Basic Anatomy & Physiology	4
CRJ 112	Procedural Criminal Law	3	BIO 111	General College Biology I w/Lab: SC1	5
CRJ 125	Policing Systems	3	BIO 112	General College Biology II w/Lab: SC1	5
CRJ 127	Crime Scene Investigation	3	BIO 148	Basic Ecology	4
CRJ 135	Judicial Function	3	BIO 150	Animal Biology	4
CRJ 145	Correctional Process	3	BIO 201	Human Anatomy & Physiology I w/Lab: SC1	4
CRJ 146	Community Based Corrections	3	BIO 202	Human Anatomy & Physiology II w/Lab: SC1	4
CRJ 205	Principles of Criminal Law	3	BIO 203	Advanced Human Anatomy	2
CRJ 209	Criminal Investigation I	3	BIO 204	Microbiology w/Lab: SC1	4
CRJ 210	Constitutional Law	3	BIO 216	Human Pathophysiology	4
CRJ 211	Criminal Investigation II	3	BIO 221	Botany w/Lab: SC1	5
CRJ 216	Juvenile Law & Procedures	3	BIO 224	Genetics: SC1	4
CRJ 220	Human Relations & Social Conflict	3	CHE 101	Introduction to Chemistry I w/Lab: SC1	5
CRJ 225	Crisis Intervention	3	CHE 102	Introduction to Chemistry II w/Lab: SC1	5
CRJ 230	Criminology	3	CHE 105	Chemistry in Context w/Lab: SC1	5
CRJ 231	Introduction to Forensic Science & Criminalistics	3	CHE 111	General College Chemistry I w/Lab: SC1	5
CRJ 235	Delinquent Behavior	3	CHE 112	General College Chemistry II w/Lab: SC1	5
CRJ 236	Criminal Justice Research Methods	3	CHE 211	Organic Chemistry I w/Lab	5
CRJ 245	Interview & Interrogation	3	CHE 212	Organic Chemistry II w/Lab	5
CRJ 257	Victimology	3	CSC 105	Computer Literacy	3
CRJ 268	Criminal Profiling	3	CSC 119	Introduction to Programming: Programming Language)	3
ECO 201	Principles of Macroeconomics: SS1	3	CSC 120	Problem Solving With (Software Package)	3
ECO 202	Principles of Microeconomics: SS1	3	CSC 126	Game Design & Development	3
ECO 245	Environmental Economics: SS1	3	CSC 160	Computer Science I: (Language)	4
ETH 200	Introduction to Ethnic Studies: SS3	3	CSC 161	Computer Science II: (Language)	4
ETH 224	Introduction to Chicano Studies	3	CSC 220	Introduction to Microsoft Visual Basic. NET	3
GEO 105	World Regional Geography: SS2	3	CSC 225	Computer Architecture/Assembly Language Programming	4
GEO 106	Human Geography: SS2	3	CSC 230	C Programming: Platform	3
JOU 105	Introduction to Mass Media: SS3	3	CSC 233	Object-Oriented Programming: (Language)	3
POS 105	Introduction to Political Science: SS1	3	CSC 236	C# Programming	4
POS 111	American Government: SS1	3	CSC 240	Java Programming	3
POS 125	American State & Local Government: SS1	3	CSC 246	Mobile App Development :(Platform)	3
POS 205	International Relations: SS1	3	CSC 267	Object-Oriented Analysis & Design	3
POS 215	Current Political Issues: SS1	3	ENV 101	Environmental Science w/Lab: SC1	4
POS 225	Comparative Government: SS1	3	ENV 110	Natural Disasters: SC2	3
PSY 101	General Psychology I: SS3	3	GEO 111	Physical Geography: Landforms w/Lab: SC1	4
PSY 102	General Psychology II: SS3	3	GEO 112	Physical Geography: Weather, Climate & Ecosystems w/Lab: SC1	4
PSY 112	Psychology of Adjustment	3	GEY 108	Geology of U.S. National Parks: SC2	3
PSY 205	Psychology of Gender: SS3	3	GEY 111	Physical Geology w/Lab: SC1	4
PSY 217	Human Sexuality: SS3	3	GEY 112	Historical Geology w/Lab: SC1	4
PSY 226	Social Psychology: SS3	3	GEY 135	Environmental Geology w/Lab: SC1	4
PSY 227	The Psychology of Death & Dying: SS3	3	GEY 143	Introduction to Cave Science & Karst Science	2
PSY 235	Human Growth & Development: SS3	3	GEY 205	The Geology of Colorado	3
PSY 238	Child Development: SS3	3	HWE 100	Human Nutrition	3
PSY 247	Child Abuse & Neglect	3	MET 150	General Meteorology w/Lab: SC1	4
PSY 249	Abnormal Psychology: SS3	3	PHY 105	Conceptual Physics w/Lab: SC1	4
PSY 265	Psychology of Personality: SS3	3	PHY 111	Physics: Algebra-Based I w/Lab: SC1	5
SOC 101	Introduction to Sociology I: SS3	3	PHY 112	Physics: Algebra-Based II w/Lab: SC1	5
SOC 102	Introduction to Sociology II: SS3	3			
SOC 205	Sociology of Family Dynamics: SS3	3			
SOC 216	Sociology of Gender: SS3	3			

PHY 211	Physics: Calculus-Based I w/Lab: SC1	5	HWE 124	Fitness & Wellness	2
PHY 212	Physics: Calculus-Based II w/Lab: SC1	5	HWE 125	Introduction to Exercise Health Sciences	3
SCI 155	Integrated Science I-Physics & Chemistry w/Lab: SC1	4	HWE 237	Exercise, Nutrition & Body Composition	3
SCI 156	Integrated Science II-Earth & Life Sciences w/Lab: SC1	4	HWE 248	Exercise Testing Prescription	3
Other Approved Electives			MAN 200	Human Resource Management I	3
AAA 101	College 101: Student Experience	3	MAN 216	Small Business Management	3
AAA 109	Advanced Academic Achievement	3	MAN 226	Principles of Management	3
ACC 121	Accounting Principles I	4	MAN 246	Critical Issues in Marketing & Management	3
ACC 122	Accounting Principles II	4	MAR 216	Principles of Marketing	3
ACC 211	Intermediate Accounting I	4	MAR 220	Principles of Advertising	3
ACC 212	Intermediate Accounting II	4	MAR 240	International Marketing	3
ACC 216	Governmental & Not-for-Profit Accounting	3	MAR 249	Strategic Marketing	3
ACC 226	Cost Accounting	3	MGD 107	History of Design	2
ACC 287	Cooperative Education	3	MGD 108	History of Illustration	2
BUS 115	Introduction to Business	3	MGD 164	Digital Video Editing I	3
BUS 203	Introduction to International Business	3	NRE 211	Environmental Policies & Economics	3
BUS 216	Legal Environment of Business	3	NRE 214	Environmental Issues & Ethics	3
BUS 217	Business Communication & Report Writing	3	PED 102	Weight Training I	1
BUS 226	Business Statistics	3	PED 103	Weight Training II	2
CIS 104	Word Processing with Assistive Technology	3	PED 110	Fitness Center Activity I	1
CIS 110	Introduction to Computing Technology: (Device)	1	PED 111	Fitness Center Activity II	1
CIS 115	Introduction to Computer Information Systems	3	PED 112	Fitness Center Activity III	1
CIS 118	Introduction to PC Applications	3	PED 113	Fitness Center Activity IV	1
CIS 124	Introduction to Operating Systems	3	PED 122	Step Aerobics	1
CIS 128	Operating System: Using_____	3	PED 126	Cardio Kickboxing Aerobic I	1
CIS 155	Complete Spreadsheets: (Software package)	3	PED 129	Zumba	1
CIS 267	Management of Information Systems	3	PED 140	Body Sculpturing & Toning	1
CIS 289	Capstone	3	PED 141	Pilates Matwork I	1
DIT 110	The Modified Diet	3	PED 142	Pilates Matwork II	1
ECE 101	Introduction to Early Childhood Education	3	PED 143	Yoga I	1
ECE 102	Introduction to Early Childhood Education Techniques	3	PED 144	Yoga II	1
ECE 103	Guidance Strategies for Young Children	3	PED 151	Walking & Jogging	1
ECE 125	Science/Math & the Young Child	3	PED 161	Tai Chi I	1
ECE 191	School Age Theory & Practice	3	PED 162	Tai Chi II	1
ECE 192	School Age Lab Techniques	3	PED 163	Martial Arts I	1
ECE 205	Nutrition, Health & Safety	3	PED 164	Martial Arts II	1
ECE 209	Observation & Assessment of Young Children's Development, Learning, & Programs	1	PED 230	Volleyball I	1
ECE 220	Curriculum Development: Methods & Techniques	3	PED 231	Volleyball II	1
ECE 225	Language & Cognition for the Young Child	3	REC 100	Introduction to Recreation	2
ECE 226	Creativity & the Young Child	3	RTV 100	Introduction to Electronic Media	3
ECE 237	Theories & Techniques of Social & Emotional Growth	3	RTV 212	Advanced Television Production	3
ECE 238	ECE Child Growth & Development	3			
ECE 241	Administration: Human Relations for Early Childhood Education	3			
ECE 256	Working with Families & Communities	3			
ECE 260	The Exceptional Child	3			
ECE 261	Exceptional Child Lab Techniques	3			
ECE 279	Seminar	1-6			
ECE 289	Capstone: Early Childhood Education	5			
EDU 221	Introduction to Education	3			
EDU 234	Multicultural Education	3			
EDU 261	Teaching, Learning & Technology	3			
EDU 263	Teaching & Learning Online	3			
EGG 102	Engineering Methodologies	3			
EGG 243	Engineering Economics	3			
EGG 230	Thermodynamics	3			
EGT 103	Applied Dimension & Tolerance	3			
EGT 205	Geometric Dimension & Tolerance	3			
EMS 121	EMT Fundamentals	3			
ENP 105	Introduction to Entrepreneurship	3			
FIN 201	Principles of Finance	3			
HWE 103	Community First Aid & CPR	1			
HWE 110	Fitness Conditioning & Wellness	2			
HWE 111	Health & Fitness	3			

Associate of Arts Degrees and Courses of Study

Anthropology

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy for MAT 135
- College Algebraic Literacy for MAT 121

Anthropology imparts a global, comparative, and historical (evolutionary) approach to human studies. Its subject is cultural diversity and biological variation among humans both contemporary and ancient. It seeks to answer who we are, where we come from, what is learned, and what is instinctual. Anthropology is divided into two major categories: cultural and physical. Cultural anthropology tests the accuracy of beliefs about human behavior. Physical anthropology seeks accuracy of beliefs about human biological nature and development. Specializations in anthropology include archeology, linguistics, cultural resource management, forensics, paleontology, medical anthropology, and counseling among others. In any professional career, it is increasingly important to have a concrete understanding of human behavior in a cultural context. Anthropology offers that understanding.

Program Learning Outcomes

Upon completion of the Anthropology degree program, students should be able to:

- Define and recall key aspects of all four sub-disciplines of Anthropology
- Recognize and describe the main characteristics of culture
- Discuss the most important cultural processes at work in each society
- Analyze the evolutionary process of sociocultural change
- Use methodological processes and terminology appropriate to the field of Anthropology
- Apply an anthropological perspective to real life situations
- Examine diversity and global processes and how they relate and contribute to the understanding of humanity
- Locate and synthesize relevant information

Written Communication

Six (6) credit hours

ENG 121	English Composition I: C01	3
ENG 122	English Composition II: C02	3
	OR	
ENG 122	English Composition II: C02	(3)
ENG 201	English Composition III: C03	(3)
	or	
HIS 265	Writing About History: C03	(3)

Mathematics

Three-four (3-4) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 135, except:
 - University of Colorado, Denver requires either MAT 135 or MAT 121
 - Western State Colorado University requires MAT 121

Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4)

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Natural and Physical Sciences

Eight (8) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1)

Additional Required Courses

Twenty-two (22) credit hours. Full list of requirements can be found on page 55.

COM 115	Public Speaking	3
	or	
COM 125	Interpersonal Communication	(3)
	or	
COM 220	Intercultural Communication: SS3	(3)
ANT 101	Cultural Anthropology: SS3	3
ANT 107	Introduction to Archaeology: SS3	3
ANT 111	Biological Anthropology w/Lab: SC1	4
	One (1) GT Pathways Arts and Humanities course (AH1, AH2, AH3, AH4)	3
	One (1) GT Pathways ANT course in Social and Behavioral Sciences (SS3)	3
	One (1) GT Pathways Social and Behavioral Sciences (SS2 or SS3)	3

Electives

Five-six (5-6) credit hours selected from the AA approved course list can be found on page 56.

Suggested Courses

ANT 101	Cultural Anthropology: SS3	3
ANT 107	Introduction to Archaeology: SS3	3
ANT 111	Biological Anthropology w/Lab: SC1	4
ANT 215	Native Peoples of North America: SS3	3
ANT 218	Archaeology of the Bible	3
ANT 221	Exploring Other Cultures I	3
ANT 222	Exploring Other Cultures II	3
ECO 201	Principles of Macroeconomics: SS1	3
GEO 105	World Regional Geography: SS2	3
POS 105	Introduction to Political Science: SS1	3
PSY 101	General Psychology I: SS3	3
PSY 102	General Psychology II: SS3	3
SOC 101	Introduction to Sociology I: SS3	3
SOC 102	Introduction to Sociology II: SS3	3

Total Credit Hours

60

Additional information available on the Anthropology Department website at www.pcc.edu/ant <https://www.pcc.edu/degrees-certificates/anthropology>.

Art - Art History

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Art History is the study of human expression through an examination of the history and development of painting, sculpture, architecture, ceramics, furniture and other decorative objects. Art Historians translate from the visual to the verbal, through analysis and interpretation, using a number of different approaches and methodologies. The Associate of Arts (AA) degree with designation in Art History includes courses that are common to all four-year institutions in Colorado and will prepare you for continued study at a four-year institution in pursuit of a Bachelor of Arts (BA) degree or a Bachelor of Fine Arts (BFA) degree in Art or Art History. With a degree in Art History you may be employed in one of the following career areas: museum and gallery management, media, research, arts administration, journalism, arts education, exhibition and events coordination or antiques dealer.

Program Learning Outcomes

Upon completion of the Art - Art History degree program, students should be able to:

- Accurately place a piece of art within its proper context in time and significance
- Write an MLA formatted scholarly research paper and discuss various artistic trends and periods
- Analyze various media, techniques, and individual artists both traditional and contemporary

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 120

Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4)

EXCEPT the courses listed in the Additional Required Courses section below

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Natural and Physical Sciences

Seven or eight (7 or 8) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1). One of these courses must have the required Laboratory (GT-SC1)

Additional Required Courses

Eighteen (18) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

ART 111	Art History Ancient to Medieval: AH1	3
ART 112	Art History Renaissance to 1900: AH1	3
ART 121	Drawing I	3
ART 131	Visual Concepts 2-D Design	3
ART 132	Visual Concepts 3-D Design	3
ART 207	Art History 1900 to Present: AH1	3

Electives

Ten-eleven (10-11) credit hours selected from the AA approved course list can be found on page 56.

Total Credit Hours **60**

Students planning to transfer to CSU-FC will be required to complete a 200-level world language for completion of the BA in Art - Art History. Students will be expected to be prepared upon completion of the associate's degree to take an intermediate world language or be able to pass the CSU-FC World Language placement exam at the sophomore level. It may not be possible to complete the BA in Art - Art History concentration in two years without this prior world language competency.

Additional information available on the Art - Art History Department website at www.pgcc.edu/degrees-certificates/art.

Art - Studio Art

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Studio Art is the study of how to create art, the development of an understanding about how art is made and finding your place in society. As a student in Studio Art you may take courses in color theory, ceramics, drawing, painting, printmaking, sculpture, jewelry, two-dimensional design and three-dimensional design. The Associate of Arts (AA) degree with designation in Studio Art includes courses that are common to all four-year institutions in Colorado and will prepare you for continued study at a four-year institution in pursuit of a Bachelor of Arts (BA) degree or a Bachelor of Fine Arts (BFA) degree in Studio Art. With a degree in Studio Art you may be employed in one of the following career areas: studio artist, arts councils, newspaper or publishing houses, advertising agencies, film and motion picture production, art restoration, commercial art, art therapy, art education, art museums and galleries or gallery curator.

Program Learning Outcomes

Upon completion of the Art - Studio Art degree program, students should be able to:

- Adequately utilize media such as paint, clay, and pencils
- Produce artwork that follows standards and guidelines
- Identify and describe the Visual Elements and Principles of Design

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 120

Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Arts and Humanities courses (AH2, AH3, AH4)

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1). One of these must have the required Lab (GT-SC1).

Additional Required Courses

Twenty-one (21) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

ART 111	Art History Ancient to Medieval: AH1	3
ART 112	Art History Renaissance to 1900: AH1	3
ART 121	Drawing I	3
ART 131	Visual Concepts 2-D Design	3
ART 132	Visual Concepts 3-D Design	3
ART 221	Drawing II	3
or		
ART 128	Figure Drawing I Studio Art course	(3) 3

Electives

Eight (8) credit hours selected from the AA approved course list can be found on page 56.

Total Credit Hours **60**

Additional information available on the Art - Studio Art Department website at www.pccc.edu/degrees-certificates/art.

Business

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Algebraic Literacy

The Associate of Arts Business option is the result of a statewide articulation agreement between the Colorado Community College System and the four-year colleges and universities. Students completing the following 60 hours will transfer in 100 percent of their classes and start as an entering junior at the four-year school. Please consult with your faculty advisor for the proper sequence of classes.

Program Learning Outcomes

Upon completion of the Business degree program, students should be able to:

- Analyze contemporary business concepts
- Apply comprehension of business terminology in deliverables
- Compare different economic philosophies
- Perform library research, analytical, and business writing/oral communication skills

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3

Mathematics

Eight (8) credit hours

MAT 121	College Algebra: MA1	4
MAT 125	Survey of Calculus: MA1	4
or		
Higher Level Calculus course		

Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4)

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours GT Pathways Social and Behavioral Sciences courses

ECO 201	Principles of Macroeconomics: SS1	3
ECO 202	Principles of Microeconomics: SS1	3

Natural and Physical Sciences

Eight (8) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1)

Additional Required Courses

Twenty-three (23) credit hours

ACC 121	Accounting Principles I	4
ACC 122	Accounting Principles II	4
BUS 115	Introduction to Business	3
BUS 216	Legal Environment of Business	3

BUS 217	Business Communication & Report Writing	3
BUS 226	Business Statistics	3
COM 115	Public Speaking	3
Total Credit Hours		60

Additional information available on the Business Department website at www.pgcc.edu/bus.

Communication

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

If you are a person with multiple interests and diverse talents, then Communication may be the major for you! The program of study provides rhetorical and social scientific theory, tools, and techniques for analyzing, managing and improving communication in every arena of professional and personal interaction. Topics within the discipline may include public speaking, interpersonal and group communication, intercultural and organizational communication. The Associate of Arts (AA) degree with designation in Communication includes courses that are common to all four-year institutions in Colorado and will prepare you for continued study at a four-year college/university in pursuit of a Bachelor of Arts (BA) degree in Communication. With a degree in Communication, you have employment opportunity in a variety of fields including: public relations, political science, advertising, social services, journalism, education, film production and criticism, radio/television, event planning, sales, grant or technical writing, customer service, corporate communication, employee training, personal management, entertainment, social media, education and foreign relations.

Program Learning Outcomes

Upon completion of the Communication degree program, students should be able to:

- Develop a central message using the content and supporting materials
- Incorporate language that is appropriate to the audience
- Demonstrate performance skills to share content with a particular audience for a specific occasion and purpose
- Implement an organization pattern that results in a cohesive presentation
- Employ language that enhances the presentation
- Make reference to and connect information through analysis that supports the presentation while establishing the presenter's credibility/authority on the topic
- Incorporate a variety of types of supporting material
- Manage visual aids with appropriate technology

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 120

Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4)

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

COM 220	Intercultural Communication: SS3	3
• GT - One GT Pathways Social and Behavioral Sciences course (SS1, SS2, SS3)		

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2). One of these courses must have the required laboratory (SC1).

Additional Required Courses

Eighteen (18) credit hours. Full list of requirements can be found on page 55.

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

COM 115	Public Speaking	3
COM 125	Interpersonal Communication	3
COM 217	Group Communication	3
One (1) COM course		3
Two (2) GT Pathways courses from History (HI1) or Social and Behavioral Sciences (SS1, SS2, SS3)		6

Electives

Eleven (11) credit hours selected from the AA approved course list can be found on page 56.

Please note: Additional COM courses beyond the 4 courses (12 credit hours) identified above in the Additional Required Courses section may not count toward the Communication major at the receiving four-year institution.

Total Credit Hours 60

Additional information available on the Communication Department website at www.pgcc.edu/degrees-certificates/communication.

Criminal Justice

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy for MAT 135 or MAT 120
- College Algebraic Literacy for MAT 121

The Associate of Arts in Criminal Justice is designed for students intending to transfer to a four-year school and pursue a Bachelor's degree in Criminal Justice. The Statewide Transfer Agreement will allow students to transfer to a Colorado public four-year school and complete their degree with an additional 60 credit hours.

Courses marked with an asterisk [] are not currently offered at PPCC.*

Program Learning Outcomes

Upon completion of the Criminal Justice degree program, students should be able to:

- Explain the origins of criminal behavior, society's response to crime, and the consequences of crime to our society, utilizing multiple perspectives
- Explain social injustices and social harms within criminal justice systems
- Compare theoretical frameworks to the causes and prevention of crime, the processes of criminalization, and the impact that crime has on society
- Discuss the relationships between the courtroom and its procedures, the criminal law, and issues of criminal procedure (due process vs. crime control)
- Document police-related activities through effective report writing
- Differentiate and explain the key roles in the core criminal justice areas (law enforcement, law and corrections)

Written Communication

Six (6) credit hours

ENG 121	English Composition I: C01	3
ENG 122	English Composition II: C02	3
	OR	
ENG 122	English Composition II: C02	(3)
ENG 201	English Composition III: C03	(3)
	or	
HIS 265	Writing About History: C03	(3)

Mathematics

Three-four (3-4) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 135, except:
 - University of Colorado, Colorado Springs prefers MAT 120
 - Colorado Mesa University requires either MAT 120 or MAT 121
 - University of Northern Colorado requires MAT 135

Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Arts and Humanities courses from two different categories (AH1, AH2, AH3, AH4)

History

Three (3) credit hours

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

- | | | |
|--|----------------------------------|---|
| SOC 101 | Introduction to Sociology I: SS3 | 3 |
| | AND | |
| • GT - One GT Pathways Social and Behavioral Sciences course (SS3) | | |

Natural and Physical Sciences

Seven-eight (7-8) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1). One of these courses must have the required Laboratory (GT-SC1)

Additional Required Courses

Twenty-seven (27) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

COM 115	Public Speaking	3
	or	
COM 125	Interpersonal Communication	(3)
CRJ 110	Introduction to Criminal Justice: SS3	3
CRJ 125	Policing Systems	3
CRJ 145	Correctional Process	3

Choose two (2) courses from the following

CRJ 127	Crime Scene Investigation	3
CRJ 135	Judicial Function	3
CRJ 205	Principles of Criminal Law	3
CRJ 209	Criminal Investigation I	3
CRJ 230	Criminology	3
CRJ 231	Introduction to Forensic Science & Criminalistics	3
CRJ 235	Delinquent Behavior	3
CRJ 236	Criminal Justice Research Methods	3
CRJ 257	Victimology	3
CRJ 268	Criminal Profiling	3

Choose three (3) courses from the following

If these courses are applied to this second section of the Prescribed Curriculum (Additional Required Courses) for credit, they may not be applied to the first section of the Prescribed Curriculum (General Education Requirements) for credit.

CNG 258*	Computer Forensics	3
COM 217	Group Communication	3
COM 225	Organizational Communication	3
POS 111	American Government: SS1	3
POS 125	American State & Local Government: SS1	3
PSY 207*	Introduction to Forensic Psychology	3
PSY 217	Human Sexuality: SS3	3
PSY 226	Social Psychology: SS3	3
PSY 249	Abnormal Psychology: SS3	3
SOC 231	The Sociology of Deviant Behavior: SS3	3

Electives

Zero-two (0-2) credit hours selected from the AA approved course list can be found on page 56.

Total Credit Hours 60

Additional information available on the Criminal Justice Department website at www.pgcc.edu/crj.

Dance

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

The Dance program strives to help you develop, strengthen and further advance your technique in a variety of different dance genres, as well as develop critical thinking skills through creative and scholarly processes. Dance is a unique professional field unlike any other that demands dedication, drive and determination. The dance profession requires you to be physically and emotionally strong, flexible, creative and eager. The Associate of Arts course of study in Dance includes courses that are common to all four-year institutions in Colorado and will prepare you for continued study at a four-year college/university in pursuit of a Bachelor of Arts (BA) degree in Dance. With an Associate of Arts course of study in Dance you will be able to teach dance at studios or in schools, audition for professional companies, create and produce your own work and/or transfer to a four-year institution to major in dance.

Program Learning Outcomes

Upon completion of the Dance degree program, students should be able to:

- Exhibit a sound foundation of technical & performance skills
- Apply, through embodiment and words, correct anatomy, proper alignment, and placement
- Identify, describe, and demonstrate through the generating of movement, the basic elements of dance: time, space, and energy
- Articulate aesthetic concerns in dance including the analysis of choreography, live and/or film, through speaking and writing
- Discuss the historical, aesthetic, and social concerns of Western & Non-Western Dance forms

Written Communication

Six (6) credit hours. Any (GT-CO1) course plus any (GT-CO2) course
OR Any (GT-CO2) course plus any (GT-CO3) course.

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Mathematics

Three (3) credit hours. One GT Pathways Mathematics course (GT-MA1).

Suggested Course

MAT 120	Mathematics for the Liberal Arts: MA1	4
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Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 55.

DAN 125	History of Dance I: AH1	3
One additional GT-AH course (can be AH1, AH2, AH3, or AH4, but cannot be a DAN course)		3

History

Three (3) credit hours. One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Two GT Pathways Social & Behavioral Sciences courses (GT-SS1, GT-SS2, GT-SS3).

Suggested Course

COM 220	Intercultural Communication	3
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Natural and Physical Sciences

Seven (7) credit hours. Two GT Pathways Natural & Physical Science courses (GT-SC1, GT-SC2); one of these courses must have the required laboratory (GT-SC1). Full list of requirements can be found on page 55.

Additional Required Courses

DAN 211	Dance Composition & Improvisation I	3
DAN 212	Dance Composition & Improvisation II	2
DAN 221	Dance Performance I	2
DAN 222	Dance Performance II	2
DAN 254	Methods for Teaching Dance	2
DAN 255	Dance for Camera	2
Dance technique courses in at least three different styles		10

Electives

Six (6) credit hours selected from the AA approved course list, cannot be DAN courses.

Total Credit Hours	60
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Additional information available on the Dance Department website at www.pgcc.edu/degrees-certificates/dance.

Early Childhood Education Teacher Preparation

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

The Associate of Arts Early Childhood [Teacher] Education option is the result of a Statewide articulation agreement between the Colorado Community College System and the four-year colleges and universities. Students completing the following 60 hours will transfer in 100% of their classes and start as an entering junior at the following four-year schools: Adams State, Colorado Mesa University, Colorado State University-Ft. Collins, Fort Lewis College, Metropolitan State University, University of Colorado-Denver and University of Northern Colorado. Please consult with your faculty advisor for the proper sequence of classes.

All students registered for ECE classes, both lecture-based and practicum-based courses, must submit to a criminal background check the first semester of enrollment. This process is completed on-line through the PPCC Human Resources Department, with an associated cost for the background check service. Further instructions are available on the ECE home page and will be provided the first day of class.

Courses marked with an asterisk [] are not currently offered at PPCC.*

Program Learning Outcomes

Upon completion of the Early Childhood Education Teacher Preparation degree program, students should be able to:

- Apply their knowledge of child development and learning to their teaching practices
- Develop family and community relationships
- Observe, document, and assess young children to make informed decisions
- Apply developmentally effective approaches to connect with children and families
- Use content knowledge to build meaningful curriculum
- Define and demonstrate being an early childhood professional

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3

Mathematics

Four (4) credit hours

MAT 120	Mathematics for the Liberal Arts: MA1	4
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Arts and Humanities

Six (6) credit hours

ART 110	Art Appreciation: AH1	3
MUS 120	Music Appreciation: AH1	3
THE 105	Theatre Appreciation: AH1	3
	and	
LIT 115	Introduction to Literature I: AH2	3
	or	
LIT 255	Children's Literature: AH2	(3)

History

Three (3) credit hours

HIS 121	U.S. History to Reconstruction: HI1	3
HIS 122	U.S. History since Civil War: HI1	3

Social and Behavioral Sciences

Six (6) credit hours

GEO 105	World Regional Geography: SS2	3
PSY 101	General Psychology: SS1	3

Natural and Physical Sciences

Eight (8) credit hours

SCI 155	Integrated Science I-Physics & Chemistry w/Lab: SC1	4
SCI 156	Integrated Science II-Earth & Life Sciences w/Lab: SC1	4

Students must pass with a C or higher BOTH SCI 155 and SCI 156 to satisfy the GT Pathways Natural and Physical Science requirement.

Additional Required Courses

Nineteen (19) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

ECE 101	Introduction to Early Childhood Education	3
ECE 102	Introduction to Early Childhood Education Techniques	3
ECE 103	Guidance Strategies for Young Children	3
ECE 220	Curriculum Development: Methods & Techniques	3
ECE 238	ECE Child Growth & Development	3
ECE 256	Working with Families & Communities	3

Electives

Nine (9) credit hours to be determined by home and transfer institution.

Total Credit Hours **60-61**

Additional information available on the Early Childhood Education Department website at www.pgcc.edu/ece.

Economics

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- MAT 121 and MAT 122
or
- MAT 121 and MAT 166

The Associate of Arts in Economics is designed for students intending to transfer to a four-year school and pursue a Bachelor's degree in Economics. The Statewide Transfer Agreement will allow students to transfer to a Colorado public four-year school and complete their degree with an additional 60 credit hours.

Program Learning Outcomes

Upon completion of the Economics degree program, students should be able to:

- Locate economic data relevant to a specific problem
- Analyze economic data to reach conclusions
- Identify and apply principles of economics to real-world events
- Offer alternative solutions to economic problems
- Connect knowledge to civic engagement

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3

Mathematics

Five (5) credit hours

MAT 201	Calculus I: MA1	5
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Arts and Humanities

Nine (9) credit hours. Full list of requirements can be found on page 55.

- GT - Three GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4)

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours

ECO 201	Principles of Macroeconomics: SS1	3
ECO 202	Principles of Microeconomics: SS1	3

Natural and Physical Sciences

Eight (8) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1)

Additional Required Course

Three (3) credit hours

MAT 135	Introduction to Statistics: MA1	3
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Electives

Twenty (20) credit hours selected from the AA approved course list can be found on page 56.

Total Credit Hours 60

Additional information available on the Economics Department website at www.pgcc.edu/eco.

Elementary Education Teacher Preparation

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Elementary Education Teacher Preparation allows students to complete a transferable associate of arts degree preparing them for transfer to a four-year college or university in Colorado where they can complete their Bachelor's degree and teaching credential in two additional years. Students identify a major and transfer institution prior to enrolling for courses and must meet with their faculty advisor before registering for classes to insure transferability of courses to their chosen institution/major.

Program Learning Outcomes

Upon completion of the Elementary Education Teacher Preparation degree program, students should be able to:

- Discuss the historical, social, political, philosophical, cultural, and economic forces that shape the United States public school system
- Compare and contrast teaching strategies and approaches appropriate to students of diverse needs, abilities, and backgrounds
- Define and establish goals for their own teaching careers

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3

Note: Some educator preparation programs require a B- in ENG 121 as an admission requirement. However, a C- or better meets the general education GT-CO1 requirement.

Mathematics

Six (6) credit hours

MAT 155	Integrated Math I: MA1	3
MAT 156	Integrated Math II: MA1	3

Completion of MAT 155 and MAT 156 with a C- or higher will satisfy the GT Pathways math requirement at some institutions but not all. At the receiving institution's discretion, students may be asked to complete a GT-MA1 approved course.

Arts and Humanities

Three (3) credit hours

LIT 115	Introduction to Literature I: AH2	3
LIT 201	World Literature to 1600: AH2	3
LIT 202	World Literature after 1600: AH2	3
LIT 211	American Literature to Civil War: AH2	3
LIT 221	British Literature to 1770: AH2	3

History

Three (3) credit hours

HIS 121	U.S. History to Reconstruction: HI1	3
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Social and Behavioral Sciences

Six (6) credit hours

GEO 105	World Regional Geography: SS2	3
POS 111	American Government: SS1	3

Natural and Physical Sciences

Eight (8) credit hours

SCI 155	Integrated Science I-Physics & Chemistry w/Lab: SC1	4
SCI 156	Integrated Science II-Earth & Life Sciences w/Lab: SC1	4

Students must pass with a C- or higher BOTH SCI 155 and SCI 156 to satisfy the GT Pathways science requirement.

Additional Requirements

Nine (9) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

COM 115	Public Speaking	3
EDU 221	Introduction to Education	3
PSY 238	Child Development: SS3	3

Electives

Nineteen (19) credit hours to be determined by receiving four-year institution. Contact an academic advisor for recommendations concerning elective courses.

Total Credit Hours 60

Additional information available on the Education Department website at www.pgcc.edu/edu.

English (Literature Emphasis)

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

To major in English in the new millennium is to do more than select a profession; it is to identify one's vocation. Whether students decide someday to specialize in rhetoric and composition, literary criticism, or creative writing, or to become journalists, songwriters, screenwriters, or teachers of English, they will learn to promote literacy and thoughtful dissent in contemporary society. They will learn that connections between life and literature are basic to living in and understanding a complex global community.

English majors interested in education, literature, or professional writing should contact their four-year transfer institution for recommendations concerning elective courses. Students can select an English AA Degree with Designation in Literature, or an English AA course of study in Professional Writing & Communication or a combination of both.

Courses marked with an asterisk [] are not currently offered at PGCC.*

Program Learning Outcomes

Upon completion of the English (Literature Emphasis) degree program, students should be able to:

- Create and develop ideas within the context of the situation and the assigned task(s)

- Critically read, evaluate, apply, and synthesize evidence and/or sources in support of a claim
- Follow an appropriate documentation system
- Evaluate the relevance of context when presenting a position and identify assumptions
- Establish a conclusion that is tied to the range of information presented
- Reflect on implications and consequences of stated conclusion

Written Communication

Six (6) credit hours

ENG 121	English Composition I: C01	3
ENG 122	English Composition II: C02	3
OR		
ENG 122	English Composition II: C02	(3)
ENG 201	English Composition III: C03	(3)
or		
HIS 265	Writing About History: C03	(3)

Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 120

Arts and Humanities

Nine (9) credit hours. Full list of requirements can be found on page 55.

- GT - Three GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4)

Note: GT-AH2 Literature (LIT) courses will not be accepted to fulfill this requirement.

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1). One must be with laboratory (GT-SC1).

Additional Required Courses

Eighteen (18) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

COM 115	Public Speaking	3
or		
COM 125	Interpersonal Communication	(3)
or		
COM 225	Organizational Communication	(3)

*NOTE: Students are required to take a total of five (5) LIT courses (15 credits), four of which must be at the 200-level. Please consult with your receiving institution regarding best choices for literature courses.

Electives

Eight (8) credit hours selected from the AA approved course list can be found on page 56.

Recommended Courses

ENG 221	Creative Writing I: AH1	3
ENG 222	Creative Writing II	3
ENG 230	Creative Nonfiction	3
HUM 103	Introduction to Film Art: AH2	3
HUM 115	World Mythology: AH2	3
HUM 121	Early Civilization: AH2	3
HUM 122	Medieval - Modern: AH2	3
HUM 123	Modern World: AH2	3

Total Credit Hours 60

Additional information available on the English (Literature Emphasis) Department website at www.pgcc.edu/degrees-certificates/english.

Environmental Studies

Associate of Arts Course of Study

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Environmental Studies is an interdisciplinary program intended to provide liberal and practical education in the science and culture of critical, contemporary environmental issues. This track includes courses from over fifteen different departments. Most environmental studies track courses are incorporated into already existing tracks in math and sciences, the humanities, and social sciences. This program is composed of required common curriculum and some specially designed courses, introducing students to the basics of those physical, natural, and social sciences related to the environment and to human interaction within the natural world.

Program Learning Outcomes

Upon completion of the Environmental Studies degree program, students should be able to:

- Use information to describe a problem or issue and/or articulate a question related to the topic
- Evaluate the relevance of context when presenting a position and identify assumptions
- Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words)
- Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words)
- Select or develop elements of the methodology or theoretical framework to solve problems in a given discipline
- Examine evidence to identify patterns, differences, similarities, limitations, and/or implications related to the focus
- Utilize multiple representations to interpret the data
- State a conclusion based on findings
- Demonstrate how their own attitudes, behaviors, or beliefs compare or relate to those of other individuals, groups, communities, or cultures
- Examine diverse perspectives when investigating social and behavioral topics within natural or human systems

- Make connections between the world-views, power structures, and experiences of individuals, groups, communities, or cultures, in historical or contemporary contexts

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Oral Communication

Three (3) credit hours

COM 115	Public Speaking	3
or		
COM 125	Interpersonal Communication	(3)
or		
COM 220	Intercultural Communication: SS3	(3)

Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 120

Arts and Humanities / Social and Behavioral Sciences

Fifteen (15) credit hours. Full list of requirements can be found on page 55.

Two GT Pathways Arts and Humanities courses from two different areas (AH1, AH2, AH3, AH4).

Two GT Pathways Social and Behavioral Sciences courses from two different areas (SS1, SS2, SS3).

One additional GT Pathways course from Arts and Humanities or Social and Behavioral Sciences (AH1, AH2, AH3, AH4, SS1, SS2, SS3).

Suggested Courses

GT-AH1		
ART 110	Art Appreciation: AH1	3
ART 111	Art History Ancient to Medieval: AH1	3
ART 112	Art History Renaissance to 1900: AH1	3
MUS 120	Music Appreciation: AH1	3

GT-AH2		
LIT 115	Introduction to Literature I: AH2	3

GT-AH3		
PHI 111	Introduction to Philosophy: AH3	3
PHI 112	Ethics: AH3	3

GT-SS1		
POS 105	Introduction to Political Science: SS1	3

GT-SS2		
GEO 105	World Regional Geography: SS2	3

GT-SS3		
ANT 101	Cultural Anthropology: SS3	3
ANT 107	Introduction to Archaeology: SS3	3

History

Three (3) credit hours GT Pathways History course (HI1)

Suggested Courses

HIS 121	U.S. History to Reconstruction: HI1	3
HIS 122	U.S. History since the Civil War: HI1	3
HIS 208	American Indian History: HI1	3
HIS 225	Colorado History: HI1	3

Natural and Physical Sciences

Seven (7) credit hours GT Pathways Natural and Physical Sciences courses (SC1, SC2), including at least one (1) lab course (SC1). Full list of requirements can be found on page 55.

Suggested Courses

BIO 105	Science of Biology w/Lab: SC1	4
BIO 111	General College Biology I w/Lab: SC1	5
BIO 112	General College Biology II w/Lab: SC1	5
CHE 101	Introduction to Chemistry I w/Lab: SC1	5
GEY 111	Physical Geology w/Lab: SC1	4
GEY 112	Historical Geology w/Lab: SC1	4
GEY 135	Environmental Geology w/Lab: SC1	4
PHY 111	Physics: Algebra-Based I w/Lab: SC1	5
PHY 112	Physics: Algebra-Based II w/Lab: SC1	5
PHY 211	Physics: Calculus-Based I w/Lab: SC1	5

Electives

Twenty-three (23) credit hours selected from the AA approved course list can be found on page 56.

Suggested Courses

ANT 101	Cultural Anthropology: SS2	3
ANT 107	Introduction to Archaeology: SS3	3
ANT 111	Biological Anthropology w/Lab: SC1	4
ANT 215	Native Peoples of North America: SS3	3
ANT 218	Archaeology of the Bible	3
ANT 221	Exploring Other Cultures I	3
ANT 222	Exploring Other Cultures II	3
ART 121	Drawing I	3
BIO 148	Basic Ecology	4
BIO 150	Animal Biology	4
BIO 204	Microbiology w/Lab: SC1	4
COM 214	Natural Resource Interpretation & Communication	3
GEO 111	Physical Geography: Landforms w/Lab: SC1	4
HIS 207	American Environmental History: HI1	3
HIS 235	History of the American West: HI1	3
JOU 121	Photojournalism	3
LIT 211	American Literature to Civil War: AH2	3
LIT 212	American Literature after the Civil War: AH2	3
POS 125	American State & Local Government: SS1	3

Total Credit Hours **60**

French

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

PPCC's world language programs are built around the standards put forth by The American Council on the Teaching of World Languages (ACTFL). ACTFL establishes a framework guiding the standards of world language study. When you study French, you will communicate with others in French, both in and out of the classroom. You will learn about and experience other cultures, make connections between your target language and other disciplines, make comparisons between your native culture/language and the target language and culture; and become active in communities of the language you are learning. The AA degree with designation in French includes courses that are common to all four-year institutions in Colorado and will prepare you for continued study at a four-year college/university in pursuit of a Bachelor of Arts (BA degree) in French or any other discipline. An AA degree with designation in French may be a good beginning to any four-year degree as it is a valuable enhancement to any Bachelor's degree program. All four-year universities in

Colorado now have a minimum world language requirement as part of admission. World language study is compatible with all other disciplines, especially law enforcement, health professions, education, social and behavioral sciences, business, journalism and art history.

Students considering a major in a world language should be aware that first-year language courses do not count toward credit-hour requirements for a major or minor in most four-year institutions.

Students may follow the degree with designation in French or transfer guide in French to a particular four-year college/university. Consult your Faculty Advisor to assist you in determining the best pathway for you. Please note that the degree tracks in French for the Professions and French with Secondary Teaching Licensure have different requirements and are not included in this agreement.

Program Learning Outcomes

Upon completion of the French degree program, students should be able to:

- Develop a central message
- Employ language that enhances the presentation
- Incorporate language that is appropriate to the audience
- Demonstrate performance skills, (posture, gesture, eye contact, and vocal expressiveness) to share content with or present to a particular audience for a specific occasion and purpose (execute delivery)

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 120

Arts and Humanities

Nine (9) credit hours

FRE 211	French Language III: AH4	3
FRE 212	French Language IV: AH4	3

- GT - One additional GT Pathways course (AH1, AH2, AH3)

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)
- CSU-Ft. Collins requires two non-US history courses.

Social and Behavioral Sciences

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2)

Additional Required Courses

Ten (10) credit hours

FRE 111	French Language I	5
FRE 112	French Language II	5

FRE 111 and/or FRE 112 may be waived, based on a student's proficiency level.

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

Electives

Nineteen (19) credit hours selected from the AA approved course list can be found on page 56. Suggested courses include 200-level French courses and courses outside the World Language department with content relating to the French-speaking world.

PLEASE NOTE: it is recommended, but not required, that a student take either COM 115 or COM 125.

Total Credit Hours

60

Geography

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy for MAT 135 or MAT 120
- College Algebraic Literacy for MAT 121

Geography means, from its Greek origin, "to describe the earth." It is the scientific description, analysis, and explanation of spatial variations of the earth, answering questions of location and place. Geography is divided into two major fields: physical and cultural. Physical geography describes all phenomena of land, sea, and air at the surface of the earth. It focuses on processes that influence surface events, involving energy systems and environmental subsystems and materials. Cultural geography is the scientific study of the human-land relationship. It explores how humans impact the land, sea, and air and how they are influenced by the same. A background in geography lends itself to many professional fields including cartography, natural resource conservation, remote sensing and satellite imagery, geology, GIS (Geographic Information Systems), economics, community planning, historic preservation and resource analysis, and meteorology.

Program Learning Outcomes

Upon completion of the Geography degree program, students should be able to:

- Use information to describe a problem or issue and/or articulate a question related to the topic
- Evaluate the relevance of context when presenting a position and identify assumptions
- Establish a conclusion that is tied to the range of information presented
- Reflect on implications and consequences of stated conclusion
- Demonstrate how their own attitudes, behaviors, or beliefs compare or relate to those of other individuals, groups, communities, or cultures
- Examine diverse perspectives when investigating social and behavioral topics within natural or human systems

- Make connections between the worldviews, power structures, and experiences of individuals, groups, communities, or cultures, in historical or contemporary contexts

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Mathematics

Three or four (3-4) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 135, except:
 - Adams State University requires MAT 121
 - Metropolitan State University of Denver requires either MAT 135 or MAT 121
 - University of Colorado Denver requires either MAT 121 or MAT 135
 - University of Colorado, Colorado Springs prefers MAT 120

Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Arts and Humanities courses (AH1, AH2, AH3)

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Natural and Physical Sciences

Eight (8) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1)
- No GEO-prefix science courses; GEY 111 not recommended.
- Adams State, students must take BIO 111 (SC1) and CHE 101 (SC1)

Additional Required Courses

Fourteen (14) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

GEO 105	World Regional Geography: SS2	3
GEO 106	Human Geography: SS2	3
GEO 111	Physical Geography: Landforms w/Lab: SC1	4
GEO 112	Physical Geography: Weather, Climate & Ecosystems w/Lab: SC1	4

Electives

Thirteen-fourteen (13-14) credit hours selected from the AA approved course list can be found on page 56. Maximum of six (6) credit hours may be in GEO prefix. Number of elective credits may vary according to receiving institution. You are advised to contact an advisor at the receiving institution.

Total Credit Hours

60

Additional information available on the Geography Department website at www.pgcc.edu/degrees-certificates/geography.

History

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Historians study the past (as it is described in written documents) in order to provide insight to the present. As a student in History you will learn writing and communication skills, methods to analyze source materials, research, how to utilize digital collections and learn how to clearly present evidence. The Associate of Arts (AA) degree with designation in History includes courses that are common to all four-year institutions in Colorado and will prepare you for continued study at a four-year college/university in pursuit of a Bachelor of Arts (BA) degree in History. With a degree in History you may be employed in one of the following career areas: public service, law, research, politics, publishing, historical site interpretation, archival records collection analysis, historical consulting for public/private business, library management, marketing, media or education.

Students may follow the degree with designation in History or transfer guide in History to a particular four-year college/university. Consult your Faculty Advisor to assist you in determining the best pathway for you.

Program Learning Outcomes

Upon completion of the History degree program, students should be able to:

- Identify trends, events, peoples, groups, cultures, and institutions covered
- Construct historical narratives by identifying patterns of continuity and change
- Analyze secondary sources and recognize differences in historical interpretation
- Identify and evaluate the perspective of primary sources
- Use library sources for historical research
- Select and apply contemporary forms of technology to solve problems or compile information
- Be able to communicate effectively orally and in writing

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 120

Arts and Humanities

Nine (9) credit hours. Full list of requirements can be found on page 55.

- GT - Three GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4)

History

Three (3) credit hours GT Pathways History course (HI1)

HIS 101	Western Civilization: Antiquity-1650: HI1	3
HIS 111	The World: Antiquity-1500: HI1	3
	• University of Colorado Boulder requires either HIS 101 or HIS 102 to fulfill this requirement.	

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2). One course must be with required lab.

Additional Required Courses

Fifteen (15) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

COM 115	Public Speaking	3
	or	
COM 125	Interpersonal Communication	(3)
HIS 102	Western Civilization:1650-Present: HI1	3
	or	
HIS 112	The World: 1500-Present: HI1	(3)
HIS 121	U.S. History to Reconstruction: HI1	3
HIS 122	U.S. History since the Civil War: HI1	3
	One (1) additional GT Pathway History (HI1) course	3

Electives

Eleven (11) credit hours selected from the AA approved course list can be found on page 56.

Note: Students planning to transfer to CSU-Ft. Collins are advised to complete at least two semesters of one college-level world language.

Total Credit Hours 60

Additional information available on the History Department website at www.pcc.edu/degrees-certificates/History.

Humanities

Associate of Arts Course of Study

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

As a PCC humanities student you will study history, drama, philosophy, religion, fine arts, literature and music. The study will lead you to discover the nature of humankind, the values held by those living during a particular historical period and how they relate to the circumstances of the modern world. You will learn to look at the concerns of other cultures and to reassess your own values. You may later specialize in any of the fine arts, literature, and philosophy or in the history of the arts of a particular period or country. Survey courses include the study of the arts of Asia, Africa, Latin America, ethnic American groups and traditional western regions.

Students not meeting a course prerequisite must have instructor permission to enroll.

Program Learning Outcomes

Upon completion of the Humanities degree program, students should be able to:

- Create and develop ideas within the context of the situation and the assigned task(s)
- Critically read, evaluate, apply, and synthesize evidence and/or sources in support of a claim
- Follow an appropriate documentation system
- Evaluate the relevance of context when presenting a position and identify assumptions
- Establish a conclusion that is tied to the range of information presented
- Reflect on implications and consequences of stated conclusion

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
	OR	
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
	or	
HIS 265	Writing About History: CO3	(3)

Oral Communication

Three (3) credit hours

COM 115	Public Speaking	3
	or	
COM 125	Interpersonal Communication	(3)
	or	
COM 220	Intercultural Communication: SS3	(3)

Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 120

Arts and Humanities / Social and Behavioral Sciences

Fifteen (15) credit hours. Full list of requirements can be found on page 55.

Two GT Pathways Arts and Humanities courses from two different areas (AH1, AH2, AH3, AH4)

Two GT Pathways Social and Behavioral Sciences courses from two different areas (SS1, SS2, SS3)

One additional GT Pathways course from Arts and Humanities or Social and Behavioral Sciences (AH1, AH2, AH3, AH4, SS1, SS2, SS3)

Suggested Courses**GT-AH2**

HUM 115	World Mythology: AH2	3
HUM 121	Early Civilizations: AH2	3
HUM 122	Medieval - Modern: AH2	3
HUM 123	Modern World: AH2	3

GT-AH3

PHI 111	Introduction to Philosophy: AH3	3
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History

Three (3) credit hours

One guaranteed transfer course from History (HI1)

Natural and Physical Sciences

Seven (7) credit hours GT Pathways Natural and Physical Sciences courses (SC1, SC2), including at least one (1) lab course (SC1, SC2). Additional credit hours over seven (7) will be applied to the electives category. Full list of requirements can be found on page 55.

Electives

Twenty-three (23) credit hours selected from the AA approved course list can be found on page 56.

Suggested Courses

ANT 101	Cultural Anthropology: SS3	3
DAN 111	Modern Dance I	1
DAN 125	History of Dance I: AH1	3
DAN 131	Ballet I	1
HUM 131	The Arts & Cultures of Mexico	3
HUM 236	North American Indian Arts	3
HUM 238	Sacred Images, Sacred Spaces: Southwestern U.S.	3
LIT 115	Introduction to Literature I: AH2	3
LIT 201	World Literature to 1600: AH2	3
LIT 205	Ethnic Literature: AH2	3
PED 143	Yoga I	1
PED 161	Tai Chi I	1

Total Credit Hours 60

Additional information available on the Humanities Department website at www.pgcc.edu/degrees-certificates/humanities.

Journalism

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Journalists witness and record our lives and history. In the current technological era, learning how to write and then developing an expertise in a cognate area, such as business, science, law, the performing arts, literature, sports, news, and the social or behavioral sciences areas is invaluable to the industry. Journalism has changed in the past decade and offers a wider range of job opportunities.

Journalism studies at PCC focus on the study of mass media, reporting, feature writing, publication design, and editing. Students will learn about the multiple facets of mass communication from the internet to the printed page. Students will learn to interview, research, and write feature, newspaper and magazine articles, headlines, news releases, and advertisements. Students can also use the courses to update their skills in the digital age of news, Social Media, and web content.

Courses in art and digital photography are also available for PCC journalism students. In addition, students who have completed core journalism courses and who secure an internship can pursue credit for their experience. Along with specific journalism courses, journalism students are encouraged to gain a general education background and start a portfolio of their work. After completing the journalism course of study at PCC, students transferring to four-year colleges have a variety of career writing and mass communication options to pursue.

Transferability is available throughout the state of Colorado. Internships can also lead to jobs. Currently, there are internship agreements in place with KRDO, The Gazette, The Independent, and the Colorado Springs Business Journal, as well as several magazines. The Journalism Department also hosts classes that run [The Paper](#) and [Parley](#).

Program Learning Outcomes

Upon completion of the Journalism degree program, students should be able to:

- Research and write articles, news releases, and advertisements
- Create journalistic pieces for the online dissemination of news, documentary, and infotainment
- Follow principles and practices governing public relations management

Written Communication

Six (6) credit hours. Any (GT-CO1) course plus any (GT-CO2) course OR Any (GT-CO2) course plus any (GT-CO3) course.

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Mathematics

Three (3) credit hours. Any GT-MA1 course. Full list of requirements can be found on page 55.

Preferred Courses

MAT 120	Mathematics for the Liberal Arts: MA1	4
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Arts and Humanities

Six (6) credit hours. Two GT Pathways Arts & Humanities courses (GT-AH1, GT-AH2, GT-AH3, or GT-AH4). Full list of requirements can be found on page 55.

History

Three (3) credit hours. One GT Pathways History course (GT-HI1).

Social and Behavioral Sciences

Six (6) credit hours. Two GT Pathways Social & Behavioral Science courses (GT-SS1, GT-SS2, or GT-SS3).

Natural and Physical Sciences

Seven (7) credit hours. Two GT Pathways Natural & Physical Science courses (GT-SC1, GT-SC2); one of these courses must have the required laboratory (GT-SC1). Full list of requirements can be found on page 55.

Additional Required Courses

Twelve (12) credit hours	
JOU 105 Introduction to Mass Media: SS3	3
JOU 106 Media News & Reporting	3
JOU 225 New Media	3
Choose one of the following	
JOU 121 Photojournalism	3
JOU 215 Publications Production & Design	3
JOU 231 Introduction to Public Relations	4
JOU 241 Feature & Magazine Writing	3

Electives

Seventeen (17) credit hours selected from the AA approved course list. can be found on page 56. Electives CANNOT be additional JOU courses.

Total Credit Hours 60

Additional information available on the Journalism Department website at www.pgcc.edu/degrees-certificates/english/degree-options/journalism.

Music

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Music is an art form and cultural activity with sound and silence as the medium. Common elements of music are pitch, rhythm, dynamics and the sonic qualities of timbre and texture. Music is performed with a vast range of instruments and vocal techniques ranging from singing to rapping. The creation, performance, significance and even the definition of music varies according to culture and social context. The Associate of Arts (AA) degree with designation in Music includes courses that are common to all four-year institutions in Colorado and will prepare you for continued study at a four-year college/university in pursuit of a Bachelor of Arts (BA) degree in Music. (Careers in music typically require a bachelor's degree.) With a degree in Music you may be employed in one of the following areas: performance, education, composition, arrangement, audio production, artist management, orchestra/band/choral conducting, entrepreneurship, event production, instrument production/repair/sales, music engineering, music therapy, promotion, recruitment, public relations, talent scouting or tour work (road manager, booking agent).

Program Learning Outcomes

Upon completion of the Music degree program, students should be able to:

- Recognize Western musical forms and styles from the Middle Ages through the twentieth century
- Apply concepts of music theory to the analysis of music compositions
- Apply the fundamentals of music to the voice or specific musical instruments
- Performs various types of musical literature

Written Communication

Six (6) credit hours

ENG 121 English Composition I: CO1	3
ENG 122 English Composition II: CO2	3
OR	
ENG 122 English Composition II: CO2	(3)
ENG 201 English Composition III: CO3	(3)
or	
HIS 265 Writing About History: CO3	(3)

Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 120

Arts and Humanities

Six (6) credit hours

MUS 121 Music History Medieval thru Classical: AH1	3
MUS 122 Music History Early Romantic Period to the Present: AH1	3

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Note: CSU-Ft. Collins requires that one of these courses be PSY 101

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2). One of these courses must have the required laboratory (SC1)

Additional Required Courses

Twenty-six (26) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

MUS 110 Music Theory I	3
MUS 111 Music Theory II	3
MUS 112 Ear Training/Sight-singing I Lab	1
MUS 113 Ear Training/Sight-singing II Lab	1
MUS 131 Music Class I	2
MUS 141 Private Instruction	2
MUS 142 Private Instruction	2
MUS 151 Ensemble I	1
MUS 152 Ensemble II	1
MUS 210 Music Theory III	3
MUS 211 Music Theory IV	3
MUS 212 Ear Training/Sight-Singing Lab III	1
MUS 213 Ear Training/Sight-Singing Lab IV	1
MUS 241 Private Instruction	2
MUS 242 Private Instruction	2
MUS 251 Ensemble I	1
MUS 252 Ensemble II	1

Electives

Three (3) credit hours Music courses

Total Credit Hours

60

Additional information available on the Music Department website at www.pgcc.edu/degrees-certificates/Music.

Philosophy

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Philosophy, literally translated from the Greek language, means 'love of wisdom'. Philosophers study matters such as life, understanding, reality, knowledge, values, reason, mind and language. As a Philosophy student you will learn to think critically, analyze information, speak and write in a clear, articulate and incisive manner, apply ethical reasoning to decision-making scenarios, view problems from multiple viewpoints and consider different modes of reasoning. The Associate of Arts degree with designation in Philosophy includes courses that are common to all four-year institutions in Colorado and will prepare you for continued study at a four-year college/university in pursuit of a Bachelor of Arts (BA) degree in Philosophy. With a degree in Philosophy you may be employed in one of the following career areas: public/social/civil service, legal practice, government, medical/general ethics, journalism, public relations, grant writing, technical writing, advertising, marketing, theology, business or education.

Program Learning Outcomes

Upon completion of the Philosophy degree program, students should be able to:

- Use information to describe a problem or issue and/or articulate a question related to the topic
- Evaluate the relevance of context when presenting a position
- Identify assumptions
- Analyze one's own and others' assumptions
- Establish a conclusion that is tied to the range of information presented
- Reflect on implications and consequences of stated conclusion

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 120

Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Arts and Humanities courses (AH1, AH2, AH4)

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2). One of these courses must have the required laboratory (SC1).

Additional Required Courses

Fifteen (15) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

PHI 111	Introduction to Philosophy: AH3	3
PHI 112	Ethics: AH3	3
PHI 113	Logic: AH3	3

Choose two (2) courses from the following:

PHI 214	Philosophy of Religion: AH3	3
PHI 218	Environmental Ethics: AH3	3
PHI 220*	Death & Dying: AH3	3

Electives

Fourteen (14) credit hours selected from the AA approved course list can be found on page 56.

Suggested Courses

AST 102	Stellar Astronomy w/Lab: SC1	4
COM 125	Interpersonal Communication	3
or		
COM 220	Intercultural Communication: SS3	(3)
HUM 121	Early Civilization: AH2	3
PHI 114	Comparative Religions: AH3	3
POS 105	Introduction to Political Science: SS1	3

Total Credit Hours **60**

Additional information available on the Philosophy Department website at www.pgcc.edu/degrees-certificates/philosophy.

Political Science

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Political Science is the study of government: what it is, what it does, and how and why. Political scientists are interested in government at every level: local, county, state, regional, national, and international. Many of them specialize in one general area of political science such as political theory, U.S. political institutions and processes, comparative government, or international relations and organizations. Political scientists seek specialization in sub-areas within the discipline.

Program Learning Outcomes

Upon completion of the Political Science degree program, students should be able to:

- Use information to describe a problem or issue and/or articulate a question related to the topic

- Evaluate the relevance of context when presenting a position
- Identify assumptions
- Establish a conclusion that is tied to the range of information presented
- Reflect on implications and consequences of stated conclusion
- Connect disciplinary knowledge to civic engagement through one's own participation in civic life, politics, and/or government

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Mathematics

Three (3) credit hours

- GT - One GT Pathways course (MA1), prefer MAT 135

Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4)

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours

ECO 201	Principles of Macroeconomics: SS1	3
ECO 202	Principles of Microeconomics: SS1	3

Natural and Physical Sciences

Eight (8) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1)

Additional Required Courses

Twelve (12) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

POS 105	Introduction to Political Science: SS1	3
POS 111	American Government: SS1	3
POS 205	International Relations: SS1	3
POS 225	Comparative Government: SS1	3

Electives

Sixteen (16) credit hours selected from the AA approved course list can be found on page 56.

Please note: Additional Political Science (POS) courses beyond the 4 courses (12 credit hours) identified above may not count toward the Political Science major at the receiving four-year institution.

Suggested Courses

ANT	Any Approved Anthropology elective	3
GEO 105	World Regional Geography: SS2	3
GEO 106	Human Geography: SS2	3

HIS	Any Approved History elective	3
POS 125	American State & Local Government: SS1	3
POS 215	Current Political Issues: SS1	3
Total Credit Hours		60

Additional information available on the Political Science Department website at www.pccc.edu/pos.

Professional Writing & Communication

Associate of Arts Course of Study

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Professional writing is the integration of creativity, technology, and problem solving. The ability to communicate in a variety of formats to a variety of audiences for a variety of purposes is a widely sought skill in the marketplace. Students who pursue an emphasis in professional writing particularly when coupled with another major or minor will be highly competitive for careers in education, business and the arts.

Professional Writing majors interested in technical writing, creative writing or journalism should contact their four-year transfer institution for recommendations concerning elective courses.

Program Learning Outcomes

Upon completion of the Professional Writing & Communication degree program, students should be able to:

- Exhibit a thorough understanding of audience, purpose, genre, and context that is responsive to the situation
- Create and develop ideas within the context of the situation and the assigned task(s)
- Apply formal and informal conventions of writing, including organization, content, presentation, formatting, and stylistic choices, in particular forms and/or fields
- Critically read, evaluate, apply, and synthesize evidence and/or sources in support of a claim
- Follow an appropriate documentation system
- Demonstrate proficiency with conventions, including spellings, grammar, mechanics, and word choice appropriate to the writing task

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Oral Communication

Three (3) credit hours

COM 115	Public Speaking	3
COM 125	Interpersonal Communication	3
COM 220	Intercultural Communication: SS3	3

Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 120

Arts and Humanities / Social and Behavioral Sciences

Fifteen (15) credit hours. Full list of requirements can be found on page 55.

Two GT Pathways Arts and Humanities courses from two different areas (AH1, AH2, AH3, AH4)

Two GT Pathways Social and Behavioral Sciences courses from two different areas (SS1, SS2, SS3)

One additional GT Pathways course from Arts and Humanities or Social and Behavioral Sciences (AH1, AH2, AH3, AH4, SS1, SS2, SS3)

Suggested Courses

GT-AH1		
ART 110	Art Appreciation: AH1	3
ART 111	Art History Ancient to Medieval: AH1	3
ART 112	Art History Renaissance to 1900: AH1	3
THE 105	Theatre Appreciation: AH1	3
GT-AH2		
HUM 121	Early Civilization: AH2	3
HUM 122	Medieval - Modern: AH2	3
HUM 123	Modern World: AH2	3
LIT 115	Introduction to Literature I: AH2	3
LIT 201	World Literature to 1600: AH2	3
LIT 202	World Literature after 1600: AH2	3
LIT 221	British Literature to 1770: AH2	3
LIT 222	British Literature since 1770: AH2	3
GT-AH3		
PHI 111	Introduction to Philosophy: AH3	3
PHI 112	Ethics: AH3	3
PHI 113	Logic: AH3	3
GT-SS1		
ECO 201	Principles of Macroeconomics: SS1	3
ECO 202	Principles of Microeconomics: SS1	3
GT-SS3		
JOU 105	Introduction to Mass Media: SS3	3
PSY 101	General Psychology I: SS3	3
PSY 102	General Psychology II: SS3	3
SOC 101	Introduction to Sociology I: SS3	3
SOC 102	Introduction to Sociology II: SS3	3

History

One guaranteed transfer course from History (HI1)

HIS 101	Western Civilization: Antiquity-1650: HI1	3
HIS 102	Western Civilization: 1650-Present: HI1	3
HIS 121	U.S. History to Reconstruction: HI1	3
HIS 122	U.S. History since the Civil War: HI1	3

Natural and Physical Sciences

Seven (7) credit hours GT Pathways Natural and Physical Sciences courses (SC1, SC2), including at least one (1) lab course (SC1, SC2). Additional credit hours over seven (7) will be applied to the electives category. Full list of requirements can be found on page 55.

Electives

Twenty-three (23) credit hours selected from the AA approved course list can be found on page 56.

Suggested Courses

ENG 131	Technical Writing I: CO1	3
ENG 201	English Composition III: CO3	3
ENG 221	Creative Writing I: AH1I	3
ENG 222	Creative Writing II	3
ENG 227	Poetry Writing	3
ENG 230	Creative Nonfiction	3
JOU 105	Introduction to Mass Media: SS3	3

JOU 106	Media News & Reporting	3
JOU 215	Publications Production & Design	3
JOU 225	New Media	3
JOU 231	Introduction to Public Relations	4
JOU 241	Feature & Magazine Writing	3

Total Credit Hours **60**

Additional information available on the Professional Writing & Communication Department website at www.pgcc.edu/degrees-certificates/english/degree-options/professional-writing-emphasis.

Psychology

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy for MAT 135 or MAT 120
- College Algebraic Literacy for MAT 121

Psychologists study the behavior of individuals and groups and often help individuals achieve satisfactory personal adjustments. Their work includes varied activities such as teaching in colleges and universities, counseling and psychotherapy, psychological testing, planning and conducting training programs for workers, performing basic and applied research, advising on psychological methods and theories, and administering psychology programs in hospitals, clinics, research laboratories, etc. Students pursuing a bachelor's degree in psychology can fulfill lower division requirements at Pikes Peak Community College. Students should note that graduate degrees are required for most professional positions in psychology.

NOTE: Psychology majors are advised to complete PSY 101 and PSY 102.

Students may follow the degree with designation in Psychology or transfer guide in Psychology to a particular four-year college or university. Consult your Faculty Advisor to assist you in determining the best pathway for you.

Program Learning Outcomes

Upon completion of the Psychology degree program, students should be able to:

- Recognize content as specified by the American Psychological Association (APA) Guidelines for the Undergraduate Psychology Major
- Identify research methods as specified by the American Psychological Association (APA) Guidelines for the Undergraduate Psychology Major
- Identify ethical standards of the American Psychological Association (APA)
- Recognize American Psychological Association (APA) citation style

Courses marked with an asterisk [] are not currently offered at PPGC.*

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Mathematics

Three-four (3-4) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 135, except:
 - Colorado Mesa University requires either MAT 120 or MAT 121
 - Colorado State University, Pueblo prefers MAT 121
 - Fort Lewis College requires MAT 135
 - University of Colorado, Boulder requires MAT 121
 - University of Colorado, Colorado Springs requires MAT 121
 - Western State Colorado University requires MAT 121

Arts and Humanities

Nine (9) hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4). No more than two (2) courses from any one category.

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Natural and Physical Sciences

Seven-eight (7-8) credit hours. Full list of requirements can be found on page 55.

- One GT Pathways Biology course (SC1). Course must have the required laboratory.
- One GT Pathways Natural and Physical Sciences course (SC1).

Additional Required Courses

Eighteen (18) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

COM 115	Public Speaking	3
or		
COM 125	Interpersonal Communication	(3)
PSY 101	General Psychology I: SS3	3
PSY 102	General Psychology II: SS3	3

Choose nine (9) credit hours GT Pathways Psychology courses (SS3)

PSY 205	Psychology of Gender: SS3	3
PSY 217	Human Sexuality: SS3	3
PSY 226	Social Psychology: SS3	3
PSY 227	The Psychology of Death & Dying: SS3	3
PSY 235	Human Growth & Development: SS3	3
PSY 238	Child Development: SS3	3
PSY 240*	Health Psychology: SS3	3

PSY 249	Abnormal Psychology: SS3	3
PSY 265	Psychology of Personality: SS3	3

Electives

Six-eight (6-8) credit hours selected from the AA approved course list can be found on page 56.

Total Credit Hours 60Additional information available on the Psychology Department website at www.pgcc.edu/psy.

Social Work Transfer

Associate of Arts Course of Study

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

This program provides the first two years for transfer students who wish to pursue a career in social work or the human services field. Because of different requirements at four-year institutions, it is important that students work with advisors. Students planning to transfer to CSU-Pueblo should directly follow the plan below. Students transferring to Metro State University must consult with their program advisor, as Metro State has a slightly different articulation agreement.

NOTE: To be employed in the social work field it is expected that you will be able to pass background checks. This will include fingerprinting for the Colorado Bureau of Investigation and a Central Registry Inquiry.

Program Learning Outcomes

Upon completion of the Social Work Transfer degree program, students should be able to:

- Explain and discuss matters of inequality impacting various demographic groups based on gender, power, culture, religion, and sexuality
- Distinguish the various social service agencies available in the community and contrast how each unique service can meet the needs of unique individuals and their circumstances
- Construct a warranted conclusion by recognizing assumptions, interpreting data, evaluating evidence, and examining implications
- Assess issues affecting their communities from a variety of perspectives

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Oral Communication

Three (3) credit hours

Suggested Course

COM 115	Public Speaking	3
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Mathematics

Three (3) credit hours

Required Courses

MAT 135	Introduction to Statistics: MA1	3
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Arts and Humanities

Six (6) credit hours GT Pathways Arts and Humanities courses from two different areas (AH1, AH2, AH3, AH4). Full list of requirements can be found on page 55.

Social and Behavioral Sciences

Nine (9) credit hours

POS 111	American Government: SS1	3
PSY 101	General Psychology I: SS3	3
SOC 101	Introduction to Sociology I: SS3	3

History

Three (3) credit hours GT Pathways History course (HI1)

Natural and Physical Sciences

Eight (8) credit hours GT Pathways Natural and Physical Sciences courses (SC1, SC2), including at least one (1) lab course (SC1, SC2). Full list of requirements can be found on page 55.

Required Courses

BIO 105	Science of Biology w/Lab: SC1	4
	Four (4) credit hours from SC1 or SC2	4

Additional Required Courses

Twenty-two (22) credit hours

ETH 224	Introduction to Chicano Studies	3
HWE 103	Community First Aid & CPR	1
SWK 100	Introduction to Social Work	3
SWK 201	Human Behavior in the Social Environment I	3
SWK 202	Human Behavior in the Social Environment II	3
SWK 205	Social Welfare in the U.S.	3
SWK 222	Introduction to Social Work Practice	3
WST 200	Introduction to Women's Studies: SS3	3

Total Credit Hours 60

Additional information available on the Social Work Department website at www.pgcc.edu/swk.

Sociology

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy for MAT 135 or MAT 120
- College Algebraic Literacy for MAT 121 or MAT 123

Sociology is a systematic study of society which includes people in groups, cultures and subcultures, the socialization process, social organization, social institutions (political, religious, educational, economic, etc.), social stratifications, social change, race and ethnic relations, human ecology, and social problems. As an intellectual discipline, it deals with developing scientific and reliable knowledge about human social relationships in group life. Courses are designed to increase personal awareness of the social environment, to prepare for interpersonal relationships in careers, and to equip students for further studies in sociology.

Program Learning Outcomes

Upon completion of the Sociology degree program, students should be able to:

- Identify and explain the three main theoretical perspectives of sociology
- Apply theoretical perspectives to explain stratification in society

- Communicate effectively sociological content in a written format
- Use the tools of sociology to analyze social realities
- Identify and apply knowledge of key sociological concepts

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
	OR	
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
	or	
HIS 265	Writing About History: CO3	(3)

Mathematics

Three-four (3-4) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 135, except:
 - Adams State University prefers MAT 121
 - Colorado Mesa University requires either MAT 120 or MAT 121
 - University of Colorado, Denver requires either MAT 121 or MAT 123 or MAT 135
 - Western State Colorado University requires either MAT 120 or MAT 121

Arts and Humanities

Nine (9) credit hours. Full list of requirements can be found on page 55.

- GT - Three GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4)

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Natural and Physical Sciences

Eight (8) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1)

Additional Required Courses

Eighteen (18) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

COM 115	Public Speaking	3
	or	
COM 125	Interpersonal Communication	(3)
SOC 101	Introduction to Sociology I: SS3	3
SOC 102	Introduction to Sociology II: SS3	3
	Three (3) additional GT Pathways Sociology courses (SS3)	9

Electives

Six-seven (6-7) credit hours selected from the AA approved course list can be found on page 56.

Please note: Additional SOC courses beyond the 5 courses (15 credit hours) identified above may not count toward the Sociology major at the receiving four-year institution.

Suggested Courses

ANT 101	Cultural Anthropology: SS3	3
FOL	Any World Language	5
PSY 101	General Psychology I: SS3	3
PSY 102	General Psychology II: SS3	3
SOC 205	Sociology of Family Dynamics: SS3	3
SOC 216	Sociology of Gender: SS3	3
SOC 218	Sociology of Diversity: SS3	3
SOC 220	Sociology of Religion: SS3	3
SOC 231	The Sociology of Deviant Behavior: SS3	3
SOC 237	Sociology of Death & Dying: SS3	3
Total Credit Hours		60

Additional information available on the Sociology Department website at www.pgcc.edu/soc.

Spanish

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

PPCC's world language programs are built around the standards put forth by The American Council on the Teaching of World Languages (ACTFL). ACTFL establishes a framework guiding the standards of world language study. When you study Spanish, you will communicate with others in Spanish, both in and out of the classroom. You will learn about and experience other cultures, make connections between your target language and other disciplines, make comparisons between your native culture/language and the target language and culture; and become active in communities of the language you are learning. The AA degree with designation in Spanish includes courses that are common to all four-year institutions in Colorado and will prepare you for continued study at a four-year college/university in pursuit of a Bachelor of Arts (BA degree) in Spanish or any other discipline. An AA degree with designation in Spanish may be a good beginning to any four-year degree as it is a valuable enhancement to any Bachelor's degree program. All four-year universities in Colorado now have a minimum world language requirement as part of admission. World language study is compatible with all other disciplines, especially law enforcement, health professions, education, social and behavioral sciences, business, journalism and art history.

Students considering a major in a world language should be aware that first-year language courses do not count toward credit-hour requirements for a major or minor in most four-year institutions.

Students may follow the degree with designation in Spanish or transfer guide in Spanish to a particular four-year college/university. Consult your Faculty Advisor to assist you in determining the best pathway for you. Please note that the degree tracks in Spanish for the Professions and Spanish with Secondary Teaching Licensure have different requirements and are not included in this agreement.

Program Learning Outcomes

Upon completion of the Spanish degree program, students should be able to:

- Develop a central message
- Employ language that enhances the presentation
- Incorporate language that is appropriate to the audience
- Demonstrate performance skills, (posture, gesture, eye contact, and vocal expressiveness) to share content with or present to a particular audience for a specific occasion and purpose (execute delivery)

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
	OR	
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
	or	
HIS 265	Writing About History: CO3	(3)

Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 120

Arts and Humanities

Nine (9) credit hours

SPA 211	Spanish Language III: AH4	3
SPA 212	Spanish Language IV: AH4	3
	• GT - One GT Pathways Arts and Humanities courses from (AH1, AH2, AH3, AH4). Students with a higher proficiency level than is required for SPA 211 or SPA 212 should substitute other Arts and Humanities courses. Heritage speakers may want to substitute SPA 261 and SPA 262, if available.	

History

Three (3) credit hours GT Pathways History course (HI1)

HIS 244	History of Latin America: HI1	3
	or	
	One GT Pathways History course (HI1) focusing on the Spanish-speaking world (non-U.S.) or another GT Pathways non-U.S. History course.	(3)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2). One of these courses must have the required laboratory (SC1)

Additional Required Courses

Thirteen (13) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

COM 115	Public Speaking (recommended)	3
	or	
COM 125	Interpersonal Communication	(3)
SPA 111	Spanish Language I	5
SPA 112	Spanish Language II	5

PLEASE NOTE: SPA 111 and/or SPA 112 may be waived, based on a student's proficiency level. Students should consult a departmental advisor at the four-year college or university.

Electives

Thirteen (13) credit hours selected from the AA approved course list can be found on page 56. Suggested courses include 200-level Spanish courses; courses outside the World Language department with content related to the Spanish-speaking world.

Total Credit Hours 60

Theatre

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

As a student in Theatre you will learn fundamental performance and technical production processes for the theatre arts, discuss the historical and cultural dimensions of theatre, and understand the interaction between script, actor, and audience as well as the areas of scenery, lighting, sound and costume. The Associate of Arts (AA) degree with designation in Theatre includes courses that are common to all four-year institutions in Colorado and prepares students for continued study at a four-year college/university in pursuit of a Bachelor of Arts (BA) degree in Theatre. With a degree in Theatre you may be employed in one of the following career areas: education, design, technical theatre, theatre management, advertising, marketing, management, social work, professional performance, stage direction, or stage management.

Program Learning Outcomes

Upon completion of the Theatre degree program, students should be able to:

- Discuss the history and development of theatrical practices from Ancient Greece to present as well as non-western forms of theatre
- Implement playwriting techniques emphasizing elements of dramatic structure, dialogue, styles, creative writing, and theatrical practices
- Apply theories of theatre production as they relate to participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage managing, and administration
- Present a theatrical production to the public in a real acting environment

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
	OR	
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
	or	
HIS 265	Writing About History: CO3	(3)

Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 120

Arts and Humanities

Six (6) credit hours

THE 105	Theatre Appreciation: AH1	3
THE 211	Development of Theatre Greek-Renaissance: AH1	3

Students planning to attend University of Colorado Boulder in Theatre should consult UCB Theatre advisors regarding THE 105.

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2). One of these courses must have the required laboratory (SC1).

Additional Required Courses

Eighteen (18) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

THE 108	Theatre Script Analysis: AH1	3
THE 111	Acting I	3
THE 116	Technical Theatre	3
THE 212	Development of Theatre Restoration to Modern: AH1	3
THE 215	Playwriting: AH1	3

Choose one (1) course from the following:

THE 131	Theatre Production I	3
THE 132	Theatre Production II	3
THE 231	Theatre Production III	3
THE 232	Theatre Production IV	3

Electives

Eleven (11) credit hours selected from the AA approved course list. Students interested in attending MSU Denver or CSU-Fort Collins are advised to take COM 115.

Students who plan to transfer to UCB or UCCS may not take elective courses with a THE prefix.

Total Credit Hours 60

World Languages

Associate of Arts Course of Study

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

As a PCC world language student, you will be prepared to be a responsible citizen, educated worker and culturally prepared for a world that is based on international partnerships. You will experience classes that are more than lectures because they employ modern learning approaches and techniques. Our innovative and creative instructors will work closely to help each student with language appreciation and acquisition while helping them to master grammatical written work and linguistics.

Students may need to contact a World Language instructor in order to be placed into the correct level of that given language.

Students considering a major in a world language should be aware that first-year language courses do not count toward credit-hour requirements for a major or minor in most four-year institutions.

There is a national equivalency test that can be located on the internet. It is the College Level Examination Program, C.L.E.P. It is currently available in French, Spanish and German. This test costs a small amount of money, but it offers the student a chance to test out of the language 111 and 112 courses for up to ten hours of college credit.

Program Learning Outcomes

Upon completion of the World Languages degree program, students should be able to:

- Develop a central message
- Employ language that enhances the presentation
- Incorporate language that is appropriate to the audience
- Demonstrate performance skills, (posture, gesture, eye contact, and vocal expressiveness) to share content with or present to a particular audience for a specific occasion and purpose (execute delivery)

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Oral Communication

Three (3) credit hours

COM 115	Public Speaking	3
or		
COM 125	Interpersonal Communication	(3)
or		
COM 220	Intercultural Communication: SS3	(3)

Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1) prefer MAT 120

Arts and Humanities / Social and Behavioral Sciences

Fifteen (15) credit hours. Full list of requirements can be found on page 55.

Two GT Pathways Arts and Humanities courses from two different areas (AH1, AH2, AH3, AH4).

Two GT Pathways Social and Behavioral Sciences courses from two different areas (SS1, SS2, SS3).

One additional GT Pathways course from Arts and Humanities or Social and Behavioral Sciences (AH1, AH2, AH3, AH4, SS1, SS2, SS3).

GT-AH4

WOL 211	World Language III	3
WOL 212	World Language IV	3

History

One guaranteed transfer non-U.S. History course from History (HI1).

Natural and Physical Sciences

Seven (7) credit hours GT Pathways Natural and Physical Sciences courses (SC1, SC2), including at least one (1) lab course (SC1, SC2). Additional credit hours over seven (7) will be applied to the electives category. Full list of requirements can be found on page 55.

Electives

Twenty-three (23) credit hours selected from the AA approved course list can be found on page 56.

Ten (10) credit hours

WOL 111	World Language I	5
WOL 112	World Language II	5

Thirteen (13) credit hours selected from the AA approved course list can be found on page 56. Suggested courses include 200-level WOL courses and courses outside the chosen WOL department with content related to the WOL-speaking world.

Total Credit Hours **60**

¹WOL is a standard course prefix. Each specific world language has its own prefix, for example, SPA = Spanish.

Additional information available on the World Language Department website at www.pgcc.edu/degrees-certificates/world-languages.

Associate of Science Degree (AS)

The Associate of Science degree is designed for students who want an emphasis in natural sciences, mathematics, computer science, pre-engineering, and pre-allied health and intend to transfer to four-year colleges and universities.

To earn the Associate of Science Degree, students must complete the following course requirements for a total of 60 semester credit hours, at least 36 of which must be Colorado State-Guaranteed Courses. Receiving institutions will accept all applicable credits earned within ten years of transfer to the receiving institution. Credits earned over ten years will be evaluated on a course-by-course basis.

Courses marked with an asterisk [] are not currently offered at PPCC.*

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Oral Communication

Three (3) credit hours

COM 115	Public Speaking	3
COM 125	Interpersonal Communication	3
COM 220	Intercultural Communication: SS3	3

Mathematics

Three (3) credit hours

GT-MA1:	MAT 120, MAT 121, MAT 122, MAT 123, MAT 125, MAT 135, MAT 166, MAT 201, MAT 202, MAT 203, MAT 204, MAT 215, MAT 261*, MAT 265
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History

Three (3) credit hours

GT-HI1:	HIS 101, HIS 102, HIS 111, HIS 112, HIS 121, HIS 122, HIS 203, HIS 205, HIS 207, HIS 208, HIS 215, HIS 218, HIS 225, HIS 235, HIS 236, HIS 243, HIS 244, HIS 245*, HIS 246*, HIS 247, HIS 249, HIS 250, HIS 251, HIS 255, HIS 259
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Arts and Humanities

Six (6) credit hours. Two GT Pathways courses from two different areas (AH1, AH2, AH3, AH4).

GT-AH1:	ART 110, ART 111, ART 112, ART 207, DAN 125, MUS 120, MUS 121, MUS 122, MUS 123, MUS 125, THE 105, THE 108, THE 211, THE 212, THE 215
GT-AH2:	HUM 103, HUM 115, HUM 121, HUM 122, HUM 123, LIT 115, LIT 201, LIT 202, LIT 205, LIT 211, LIT 212, LIT 221, LIT 222, LIT 225, LIT 246, LIT 259*, LIT 268
GT-AH3:	PHI 111, PHI 112, PHI 113, PHI 114, PHI 115, PHI 116, PHI 205, PHI 214, PHI 218, PHI 220*
GT-AH4:	FRE 211, FRE 212, GER 211, GER 212, ITA 211, ITA 212, JPN 211, JPN 212, RUS 211, RUS 212, SPA 211, SPA 212

Social and Behavioral Sciences

Six (6) credit hours. Two GT Pathways courses from two different areas (SS1, SS2, SS3).

GT-SS1:	AGE 102*, ECO 101*, ECO 201, ECO 202, ECO 211*, ECO 245, POS 105, POS 111, POS 125, POS 205, POS 215, POS 225
GT-SS2:	GEO 105, GEO 106
GT-SS3:	AGR 260*, ANT 101, ANT 102*, ANT 107, ANT 108*, ANT 215, ANT 225, ANT 250, COM 220, CRJ 110, ETH 200, JOU 105, PSY 101, PSY 102, PSY 205, PSY 217, PSY 226, PSY 227, PSY 231*, PSY 235, PSY 238, PSY 240*, PSY 249, PSY 265, SOC 101, SOC 102, SOC 205, SOC 216, SOC 218, SOC 220, SOC 231, SOC 237, WST 200, WST 225, WST 240*, WST 249*

Natural and Physical Sciences

Twelve (12) credit hours. One (2 course) lab sequence in any GT Pathways science discipline (SC1); additional GT Pathways lab science course (SC1).

Meet with your advisor to choose the appropriate Natural and Physical Sciences classes for your Associate of Science degree. While all GT-SC1 classes transfer, some may not be applicable to your academic goals.

GT-SC1:	AGY 240, ANT 111, ANT 212, AST 101, AST 102, BIO 104, BIO 105, BIO 111, BIO 112, BIO 201, BIO 202, BIO 204, BIO 208*, BIO 221, BIO 224, CHE 101, CHE 102, CHE 105, CHE 111, CHE 112, ENV 101, GEO 111, GEO 112, GEY 111, GEY 112, GEY 135, GEY 216*, MET 150, PHY 105, PHY 107*, PHY 111, PHY 112, PHY 211, PHY 212, SCI 155, SCI 156
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Additional Required Courses and Electives

Twenty-one (21) credit hours selected from the AS approved course list.

Total Credit Hours **60**

Other Requirements

1. A minimum of 60 credit hours in a prescribed program of study with a cumulative grade point average of 2.0 (a C average). At least 15 of these credit hours must be earned from PPCC.
2. Only six (6) elective credits are allowed in any combination of PED courses.
3. Students may concentrate their study in a specialized area such as biology or chemistry. Many "Degrees with Designation" and "Course of Study" are included in the next section of this catalog.
4. Career and technical education courses, whether taken at another institution or at PPCC, are not accepted toward this degree without approval of the Vice President for Instructional Services. Approval is given only when it is appropriate to the educational objectives of a student.
5. Courses numbered below 100 do not apply toward degrees.

World Language Note: It is advisable to verify the world language admissions requirements for the university/four-year college you are planning to attend. For example, many of the Colorado four-year institutions require world languages for admission; the CU system requires 2-3 years of high school world language (or equivalent 2-3 semesters at Pikes Peak Community College). Students planning to attend a Colorado four-year institution who do not have the prerequisite world language requirement from high school should consider enrolling in these courses in addition to the degree requirements.

Approved Elective Course List for AS Degrees

These courses are guaranteed to transfer as part of the 60+60 Bachelor's Degree Transfer Program. State-wide and individual college transfer agreements prescribe electives which transfer as part of those programs. Students who transfer prior to completing the AS degree are responsible for checking transfer of individual courses with the receiving four-year institution.

Twenty-one (21) credits must be selected from the following list of Mathematics and Science courses to complete the Associate of Science Degree. Up to two credits can be selected from the Associate of Arts Approved Electives list.

Mathematics

MAT 121	College Algebra: MA1	4
MAT 122	College Trigonometry: MA1	3
MAT 125	Survey of Calculus: MA1	4
MAT 135	Introduction to Statistics: MA1	3
MAT 166	Pre-Calculus: MA1	5
MAT 201	Calculus I: MA1	5
MAT 202	Calculus II: MA1	5
MAT 203	Calculus III: MA1	4
MAT 204	Calculus III with Engineering Applications: MA1	5
MAT 215	Discrete Mathematics: MA1	4
MAT 265	Differential Equations: MA1	3

Sciences

AST 101	Planetary Astronomy w/Lab: SC1	4
AST 102	Stellar Astronomy w/Lab: SC1	4
BIO 111	General College Biology I w/Lab: SC1	5
BIO 112	General College Biology II w/Lab: SC1	5
BIO 201	Human Anatomy & Physiology I w/Lab: SC1	4
BIO 202	Human Anatomy & Physiology II w/Lab: SC1	4
BIO 204	Microbiology w/Lab: SC1	4
BIO 216	Human Pathophysiology	4
BIO 221	Botany w/Lab: SC1	5
BIO 224	Genetics: SC1	4
CHE 111	General College Chemistry I w/Lab: SC1	5
CHE 112	General College Chemistry II w/Lab: SC1	5
CHE 211	Organic Chemistry I w/Lab	5
CHE 212	Organic Chemistry II w/Lab	5
CSC 105	Computer Literacy	3
CSC 119	Introduction to Programming: Programming Language)	3
CSC 120	Problem Solving with (Software Package)	3
CSC 126	Game Design & Development	3
CSC 160	Computer Science I (Language)	4
CSC 161	Computer Science II (Language)	4
CSC 225	Computer Architecture/Assembly Language Programming	4
CSC 230	C Programming: Platform	3
CSC 240	Java Programming	3
ENV 101	Environmental Science w/Lab: SC1	4
GEO 111	Physical Geography: Landforms w/Lab: SC1	4
GEO 112	Physical Geography: Weather, Climate & Ecosystems w/Lab: SC1	4
GEY 111	Physical Geology w/Lab: SC1	4
GEY 112	Historical Geology w/Lab: SC1	4
GEY 135	Environmental Geology w/Lab: SC1	4
MET 150	General Meteorology w/Lab: SC1	4
PHY 111	Physics: Algebra-Based I w/Lab: SC1	5
PHY 112	Physics: Algebra-Based II w/Lab: SC1	5
PHY 211	Physics: Calculus-Based I w/Lab: SC1	5
PHY 212	Physics: Calculus-Based II w/Lab: SC1	5

Associate of Science Degrees and Courses of Study

Biology

Associate of Science Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- MAT 121 and MAT 122
or
- MAT 121 and MAT 166

The study of biology prepares one for a variety of fields including the traditional ones—biology teacher, doctor, nurse, or conservationist. New fields have developed in several life science areas such as paramedicine, cellular biology, wildlife management, and forestry. It is strongly recommended that students consult with an advisor for the specific requirements in these fields.

Students are strongly encouraged to seek academic advising prior to registration regarding the acceptability of online science courses if they anticipate transferring to a four-year institution or completing graduate work in the sciences or health professions. It should be noted that per Colorado Revised Statute, §23-1-125(1)(e), general education courses taken online are guaranteed to satisfy core course (GT Pathways) requirements at all Colorado public institutions of higher education.

Program Learning Outcomes

Upon completion of the Biology degree program, students should be able to:

- Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words)
- Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words)
- Select or develop elements of the methodology or theoretical framework to solve problems
- Examine evidence to identify patterns, differences, similarities, limitations, and/or implications related to the focus
- Utilize multiple representations to interpret the data
- State a conclusion based on findings
- Demonstrate proper laboratory techniques and safe practices

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Mathematics

Five (5) credit hours

MAT 201	Calculus I: MA1	5
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Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 84.

- GT - Two GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4)

History

Three (3) credit hours. Full list of requirements can be found on page 84.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 84.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Natural and Physical Sciences

Ten (10) credit hours

BIO 111	General College Biology I w/Lab: SC1	5
CHE 111	General College Chemistry I w/Lab: SC1	5

Additional Required Courses

Twenty (20) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

BIO 112	General College Biology II w/Lab: SC1	5
CHE 112	General College Chemistry II w/Lab: SC1	5
PHY 111	Physics: Algebra-Based I w/Lab: SC1	5
PHY 112	Physics: Algebra-Based II w/Lab: SC1	5

Electives

Four (4) credit hours selected from the AS approved course list can be found on page 85.

Total Credit Hours 60

Additional information available on the Biology Department website at www.pgcc.edu/degrees-certificates/biology.

Chemistry

Associate of Science Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- MAT 121 and MAT 122
- or
- MAT 121 and MAT 166

Chemistry is one of the most diverse sciences. A chemist can study in a wide range of areas such as nuclear chemistry, biochemistry of life, chemistry of inorganic and/or organic compounds, the theory of chemical processes, and chemistry of the environment. There are many career opportunities relating to chemistry such as teaching, industrial processes, medical science, criminology, metallurgy, food processing, pharmacology, geochemistry, and environmental sciences.

Program Learning Outcomes

Upon completion of the Chemistry degree program, students should be able to:

- Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words)

- Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words)
- Select or develop elements of the methodology or theoretical framework to solve problems
- Examine evidence to identify patterns, differences, similarities, limitations, and/or implications related to the focus
- Utilize multiple representations to interpret the data
- State a conclusion based on findings
- Work effectively in diverse teams in both classroom and laboratory settings
- Follow proper procedures for safe handling and use of chemicals

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
	OR	
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
	or	
HIS 265	Writing About History: CO3	(3)

Mathematics

Five (5) credit hours

MAT 201	Calculus I: MA1	5
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Arts and Humanities

Three (3) credit hours. Full list of requirements can be found on page 84.

- GT - One GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4)

History

Three (3) credit hours. Full list of requirements can be found on page 84.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Three (3) credit hours. Full list of requirements can be found on page 84.

- GT - One GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Natural and Physical Sciences

Ten (10) credit hours

CHE 111	General College Chemistry I w/Lab: SC1	5
CHE 112	General College Chemistry II w/Lab: SC1	5

Additional Required Courses

Twenty-nine (29) credit hours

CHE 211	Organic Chemistry I w/Lab	5
CHE 212	Organic Chemistry II w/Lab	5
MAT 202	Calculus II: MA1	5
MAT 203	Calculus III: MA1	4
PHY 211	Physics: Calculus-Based I w/Lab: SC1	5
PHY 212	Physics: Calculus-Based II w/Lab: SC1	5

Electives

One (1) credit hour selected from the AS approved course list can be found on page 85.

Total Credit Hours 60

Additional information available on the Chemistry Department website at www.pgcc.edu/degrees-certificates/chemistry.

Computer Science

Associate of Science Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- MAT 121 and MAT 122
or
- MAT 121 and MAT 166

This program prepares students for transfer to a four-year school to obtain a baccalaureate degree. Individual courses are needed by students who wish to use the computer to solve problems in engineering, mathematics, sciences, and social sciences leading toward careers in telecommunications, computer design, and computer applications within various science and engineering fields. These courses are also of interest to people who are striving to master their personal computers.

Program Learning Outcomes

Upon completion of the Computer Science degree program, students should be able to:

- Discuss ways in which technology and computers impacts individuals and society
- Compare and contrast PC hardware and software systems as an informed consumer
- Install and configure computer software/hardware programs
- Use a computer operating system to manage files, folders, and drives
- Search the internet for personal, academic, and business use
- Use various communication tools for personal, academic, and business purpose
- Use writing, financial/statistical, presentation and data collecting/organization tools

Written Communication

Six (6) credit hours. Any (GT-CO1) course plus any (GT-CO2) course
OR Any (GT-CO2) course plus any (GT-CO3) course.

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
or		
HIS 265	Writing About History: CO3	(3)

Mathematics

Five (5) credit hours

Additional coursework might be required to meet prerequisite requirements for calculus. Pre-requisite courses may apply toward elective credit hours. Full list of requirements can be found on page 84.

MAT 201	Calculus I: MA1	5
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Arts and Humanities

Six (6) credit hours GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4). Full list of requirements can be found on page 84.

History

Three (3) credit hours. Any one GT Pathways History course (GT-HI1). Full list of requirements can be found on page 84.

Social and Behavioral Sciences

Six (6) credit hours. Any two (2) GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3). Full list of requirements can be found on page 84.

Natural and Physical Sciences

Seven (7) credit hours. Select from GT-SC1/GT-SC2 courses with at least one GTSC1 course. GT-SC1/GT-SC2 courses in sequence (same discipline) are recommended (and may be required depending on the receiving institution; consult the advising office). Courses must be selected in consultation with the advising office from the community college and from the intended transfer institution, if known. Seven credit minimum; additional credits in this area will be applied toward electives.

Additional Required Courses

CSC 160	Computer Science I: (Language)	4
CSC 161	Computer Science II: (Language)	4
CSC 225	Computer Architecture/Assembly Language Programming	5

Electives

Fifteen (15) credit hours. A total of 15 additional elective credits are required to complete the Associate Degree with Designation. Some four-year institutions require specific courses on top of the required courses listed above. The total number of credits for these required courses plus free electives must equal at least 15.

Total Credit Hours **60**

Additional information available on the Computer Science Department website at www.pppcc.edu/csc.

Geology

Associate of Science Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- MAT 121 and MAT 122
or
- MAT 121 and MAT 166

This program provides basic preparation in geology for students planning to transfer at the junior level. A study of geology leads to careers in a variety of sub-disciplines such as earth science teaching, petroleum geology, economic geology, mining geology, paleontology, and construction geology. Because of the location of the college in the southern Rockies, field experience is emphasized in all of the offerings.

Program Learning Outcomes

Upon completion of the Geology degree program, students should be able to:

- Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words)
- Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words)
- Select or develop elements of the methodology or theoretical framework to solve problems
- Examine evidence to identify patterns, differences, similarities, limitations, and/or implications related to the focus
- Utilize multiple representations to interpret the data
- State a conclusion based on findings

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
OR		
ENG 122	English Composition II: CO2	(3)

ENG 201	English Composition III: C03	(3)
or		
HIS 265	Writing About History: C03	(3)

Mathematics

Five (5) credit hours

MAT 201	Calculus I: MA1	5
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Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 84.

- GT - Two GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4)

History

Three (3) credit hours. Full list of requirements can be found on page 84.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 84.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Natural and Physical Sciences

Ten (10) credit hours

CHE 111	General College Chemistry I w/Lab: SC1	5
CHE 112	General College Chemistry II w/Lab: SC1	5

Additional Required Courses

Twenty-three (23) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

GEY 111	Physical Geology w/Lab: SC1	4
GEY 112	Historical Geology w/Lab: SC1	4
MAT 202	Calculus II: MA1	5
PHY 211	Physics: Calculus-based I w/Lab: SC1	5
PHY 212	Physics: Calculus-based II w/Lab: SC1	5

Electives

One (1) credit hour selected from the AS approved course list can be found on page 85.

Total Credit Hours 60Additional information available on the Geology Department website at www.pgcc.edu/degrees-certificates/geology.

Mathematics

Associate of Science Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- MAT 121 and MAT 122
- or
- MAT 121 and MAT 166

An understanding of mathematics is necessary for the study of many disciplines such as psychology, business, biology, computer science, engineering, physics, chemistry, and statistics. Students should consult with advisors to ensure that they study the proper curriculum for their respective discipline.

Students may follow the degree with designation in Mathematics or transfer guide in Mathematics to a particular four-year college/university. Consult your Faculty Advisor to assist you in determining the best pathway for you.

Program Learning Outcomes

Upon completion of the Mathematics degree program, students should be able to:

- Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words)
- Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words)
- Select or develop elements of the methodology or theoretical framework to solve problems
- Examine evidence to identify patterns, differences, similarities, limitations, and/or implications related to the focus
- Utilize multiple representations to interpret the data
- State a conclusion based on findings

Written Communication

Six (6) credit hours

ENG 121	English Composition I: C01	3
ENG 122	English Composition II: C02	3
OR		
ENG 122	English Composition II: C02	(3)
ENG 201	English Composition III: C03	(3)
or		
HIS 265	Writing About History: C03	(3)

Mathematics

Five (5) credit hours

MAT 201	Calculus I: MA1	5
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Arts and Humanities

Nine (9) credit hours. Full list of requirements can be found on page 84.

- GT - Two GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4)

History

Three (3) credit hours. Full list of requirements can be found on page 84.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 84.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Natural and Physical Sciences

Ten (10) credit hours

PHY 211	Physics: Calculus-Based I w/Lab: SC1	5
PHY 212	Physics: Calculus-Based II w/Lab: SC1	5

Additional Required Courses

Sixteen-seventeen (16-17) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

COM 115	Public Speaking	3
or		
COM 125	Interpersonal Communication	(3)

MAT 202	Calculus II: MA1	5
MAT 203	Calculus III: MA1	4
	or	
MAT 204	Calculus III with Engineering Applications: MA1	(5)
CSC 160	Computer Science I: (Language)	4

CSU-Ft Collins requires a different computer science course than the community college course. Students should seek advising at CSU-Ft Collins for information on the appropriate computer science course to take.

Electives

Four-five (4-5) credit hours selected from the AS approved course list can be found on page 85.

Total Credit Hours 60

Additional information available on the Mathematics Department website at www.pgcc.edu/degrees-certificates/math.

Physics

Associate of Science Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- MAT 121 and MAT 122
- or
- MAT 121 and MAT 166

Physics is concerned with the nature of energy and matter, space and time. The laws of physics govern everything in the universe from the tiniest bit of matter to the largest star. Physics is a prerequisite to any in-depth study of the sciences and technologies. It leads to careers in engineering, astronomy, astronautics, medical research, geophysics, meteorology, and biophysics. This program provides the necessary background for transfer to a four-year school.

Courses marked with an asterisk [] are not currently offered at PCC.*

Program Learning Outcomes

Upon completion of the Physics degree program, students should be able to:

- Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words)
- Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words)
- Select or develop elements of the methodology or theoretical framework to solve problems
- Examine evidence to identify patterns, differences, similarities, limitations, and/or implications related to the focus
- Utilize multiple representations to interpret the data
- State a conclusion based on findings

Written Communication

Six (6) credit hours

ENG 121	English Composition I: C01	3
ENG 122	English Composition II: C02	3
	OR	
ENG 122	English Composition II: C02	(3)
ENG 201	English Composition III: C03	(3)
	or	
HIS 265	Writing About History: C03	(3)

Mathematics

Five (5) credit hours

MAT 201	Calculus I: MA1	5
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Arts and Humanities

Nine (9) credit hours. Full list of requirements can be found on page 84.

- GT - Two GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4)

History

Three (3) credit hours. Full list of requirements can be found on page 84.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Three (3) credit hours. Full list of requirements can be found on page 84.

- GT - One GT Pathways Social and Behavioral Sciences course (SS1, SS2, SS3)

Natural and Physical Sciences

Ten (10) credit hours

PHY 211	Physics: Calculus-Based I w/Lab: SC1	5
PHY 212	Physics: Calculus-Based II w/Lab: SC1	5

Additional Required Courses

Twenty-four (24) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

CHE 111	General College Chemistry I w/Lab: SC1	5
CSC 160	Computer Science I: (Language)	4
	or	
CHE 112	General College Chemistry II w/Lab: SC1	(5)
MAT 202	Calculus II: MA1	5
MAT 203	Calculus III: MA1	4
	or	
MAT 204	Calculus III with Engineering Applications: MA1	(5)
MAT 261*	Differential Equations with Engineering Applications: MA1	4
	or	
MAT 265	Differential Equations: MA1	(3)
	or	
MAT 266*	Differential Equations with Linear Algebra	(4)
PHY 213*	Physics III: Calculus Based Modern Physics	3

Total Credit Hours 60

PLEASE BE ADVISED: If you choose to take one of these courses (MAT 204, MAT 261*, MAT 266*), it will put you over 60 credits. The courses will transfer but the extra credits may not. That is, the receiving institution may still require the completion of 60 credits for the major.

- Students planning to transfer to University of Colorado Boulder must take CHE 112 (not CSC 160) to fulfill this requirement.
- Students planning to transfer to University of Northern Colorado must take CSC 160 (not CHE 112) to fulfill this requirement.
- Students planning to transfer to Fort Lewis College or University of Colorado, Colorado Springs must take both CSC 160 and CHE 112.
- Students planning to transfer to a receiving institution not listed here may choose either one of these courses

Additional information available on the Physics Department website at www.pgcc.edu/degrees-certificates/physics.

Pre-Allied Health

Associate of Science Course of Study

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Algebraic Literacy

The degree options are designed for students applying to programs at four-year schools in Colorado for medical technology and physical therapy. These emphasize physiology, anatomy, chemistry, and physics. Either one or two years may be used for transfer credit to other schools. As specific requirements may vary among different schools, students are encouraged to consult catalogs of the colleges to which they plan to apply. Programs should be planned with academic advisors prior to beginning classes.

Program Learning Outcomes

Upon completion of the Pre-Allied Health degree program, students should be able to:

- Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words)
- Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words)
- Select or develop elements of the methodology or theoretical framework to solve problems
- Examine evidence to identify patterns, differences, similarities, limitations, and/or implications related to the focus
- Utilize multiple representations to interpret the data
- State a conclusion based on findings

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
	OR	
ENG 122	English Composition II: CO2	(3)
ENG 201	English Composition III: CO3	(3)
	or	
HIS 265	Writing About History: CO3	(3)

Oral Communication

Three (3) credit hours

COM 115	Public Speaking	3
COM 125	Interpersonal Communication	3
COM 220	Intercultural Communication: SS3	3

Mathematics

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category). Full list of requirements can be found on page 84.

Suggested Course

MAT 121	College Algebra: MA1	4
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Arts and Humanities

Six (6) credit hours GT Pathways Arts and Humanities courses from two different areas (AH1, AH2, AH3, AH4)

History

Three (3) credit hours GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours GT Pathways Social and Behavioral Sciences courses from two different areas (SS1, SS2, SS3)

Natural and Physical Sciences

Twelve (12) credit hours GT Pathways Natural and Physical Sciences courses (SC1); additional GT Pathways lab science course (SC1). Additional credits over 12 will be included in the electives category. Full list of requirements can be found on page 84.

Suggested Courses

BIO 111	General College Biology I w/Lab: SC1	5
PHY 111	Physics: Algebra-Based I w/Lab: SC1	5

Electives

Twenty-one (21) credit hours selected from the AS approved course list can be found on page 85. Please see your advisor for help choosing your electives.

Suggested Course

BIO 201	Human Anatomy & Physiology I w/Lab: SC1	4
BIO 202	Human Anatomy & Physiology II w/Lab: SC1	4
BIO 204	Microbiology w/Lab: SC1	4
CHE 111	General College Chemistry I w/Lab: SC1	5

Physical Therapy Emphasis Suggested Electives

BIO 201	Human Anatomy & Physiology I w/Lab: SC1	4
BIO 202	Human Anatomy & Physiology II w/Lab: SC1	4
CHE 111	General College Chemistry I w/Lab: SC1	5
CSC 120	Problem Solving with (Software Package)	3

Total Credit Hours **60**

Additional information available on the Pre-Allied Health Department website at www.pgcc.edu/degrees-certificates/pre-allied-health.

Pre-Med Professions

Associate of Science Course of Study

Recommended basic skills courses are

- College Reading & Writing Literacy
- MAT 121 and MAT 122
- or
- MAT 121 and MAT 166

Health professions are necessary to provide comprehensive health care to all types of people. This program is designed to meet the needs of students who wish to go into professional health care positions in dentistry, medicine, veterinary medicine, pharmacy, and chiropractic.

Program Learning Outcomes

Upon completion of the Pre-Med Professions degree program, students should be able to:

- Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words)
- Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words)
- Select or develop elements of the methodology or theoretical framework to solve problems
- Examine evidence to identify patterns, differences, similarities, limitations, and/or implications related to the focus
- Utilize multiple representations to interpret the data
- State a conclusion based on findings

Written Communication

Six (6) credit hours		
ENG 121	English Composition I: C01	3
ENG 122	English Composition II: C02	3
OR		
ENG 122	English Composition II: C02	(3)
ENG 201	English Composition III: C03	(3)
or		
HIS 265	Writing About History: C03	(3)

Oral Communication

Three (3) credit hours		
COM 115	Public Speaking	3
COM 125	Interpersonal Communication	3
COM 220	Intercultural Communication: SS3	3

Mathematics

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category). Full list of requirements can be found on page 84.

Suggested Course		
MAT 201	Calculus I: MA1	5

Arts and Humanities

Six (6) credit hours GT Pathways Arts and Humanities courses from two different areas (AH1, AH2, AH3, AH4)

History

Three (3) credit hours GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours GT Pathways Social and Behavioral Sciences courses from two different areas (SS1, SS2, SS3)

Natural and Physical Sciences

Twelve (12) credit hours. One (2 course) lab sequence in any GT Pathways science discipline (SC1); additional GT Pathways lab science course (SC1). Additional credits over 12 will be included in the electives category. Full list of requirements can be found on page 84.

Suggested Courses		
BIO 111	General College Biology I w/Lab: SC1	5
PHY 111	Physics: Algebra-Based I w/Lab: SC1	5

Additional Required Courses and Electives

Twenty-one (21) credit hours selected from the AS approved course list can be found on page 84. Please see your advisor for help choosing your electives.

Suggested Courses		
CHE 111	General College Chemistry I w/Lab: SC1	5
CHE 112	General College Chemistry II w/Lab: SC1	5
PHY 112	Physics: Algebra-Based II w/Lab: SC1	5

Total Credit Hours 60

Additional information available on the Pre-Med Professions Department website at www.pgcc.edu/degrees-certificates/pre-med.

Psychology

Associate of Science Degree with Designation

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Algebraic Literacy

Psychologists study the behavior of individuals and groups and often help individuals achieve satisfactory personal adjustments. Their work includes varied activities such as teaching in colleges and universities, counseling and psychotherapy, psychological testing, planning and conducting training programs for workers, performing basic and applied research, advising on psychological methods and theories, and administering psychology programs in hospitals, clinics, research laboratories, etc. Students pursuing a bachelor's degree in psychology can fulfill lower division requirements at Pikes Peak Community College. Students should note that graduate degrees are required for most professional positions in psychology.

NOTE: Psychology majors are advised to complete PSY 101 and PSY 102.

The Associate of Science degree is designed for students who want an emphasis in natural sciences, mathematics, computer science, pre-engineering, and allied health and intend to transfer to four-year colleges and universities.

To earn the Associate of Science Degree, students must complete the following course requirements for a total of 60 semester credit hours, at least 36 of which must be Colorado State-Guaranteed Courses.

Students may follow the degree with designation in Psychology or transfer guide in Psychology to a particular four-year college/university. Consult your Faculty Advisor to assist you in determining the best pathway for you.

Program Learning Outcomes

Upon completion of the Psychology degree program, students should be able to:

- Recognize content as specified by the American Psychological Association (APA) Guidelines for the Undergraduate Psychology Major
- Identify research methods as specified by the American Psychological Association (APA) Guidelines for the Undergraduate Psychology Major
- Identify ethical standards of the American Psychological Association (APA)
- Recognize American Psychological Association (APA) citation style

Written Communication

Six (6) credit hours		
ENG 121	English Composition I: C01	3
ENG 122	English Composition II: C02	3
OR		
ENG 122	English Composition II: C02	(3)
ENG 201	English Composition III: C03	(3)
or		
HIS 265	Writing About History: C03	(3)

Mathematics

Four (4) credit hours

MAT 121 College Algebra: MA1 4

Arts and Humanities

Nine (9) credit hours. Full list of requirements can be found on page 84.

PHI 111 Introduction to Philosophy: AH3 3
or

PHI 112 Ethics: AH3 (3)

- GT - Two GT Pathways Arts and Humanities courses from two different areas (AH1, AH2, AH3, AH4)

History

Three (3) credit hours. Full list of requirements can be found on page 84.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 84.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Natural and Physical Sciences

Ten (10) credit hours

BIO 111 General College Biology I w/Lab: SC1 5

CHE 111 General College Chemistry I w/Lab: SC1 5

Additional Required Courses

Nine (9) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the Bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

COM 115 Public Speaking 3
or

COM 125 Interpersonal Communication (3)

PSY 101 General Psychology I: SS3 3

PSY 102 General Psychology II: SS3 3

Electives

Thirteen (13) credit hours selected from the AS approved course list can be found on page 85.

Students planning to transfer to University of Colorado Denver should complete both two-semester sequences of BIO 111 and BIO 112 and CHE 111 and CHE 112 at the community college; in addition, electives are restricted to non-Psychology courses.

Total Credit Hours 60

Additional information available on the Psychology Department website at www.ppsc.edu/psy.

Associate of General Studies Degree (AGS)

The Associate of General Studies degree provides an educational plan for the student to create a personalized program. It allows the blending of both career and technical and transfer courses without the constraints of specialization. Receiving institutions will accept all applicable credits earned within ten years of transfer to the receiving institution. Credits earned over ten years will be evaluated on a course-by-course basis. Courses must not be developmental.

Requirements

1. 60 credit hours of course work acceptable toward the degree.
2. A cumulative grade point average of 2.0 (a C average).
3. At least 15 of these credit hours must be earned from PCC.
4. Students consult with an advisor and select 30 semester hours of open electives. Electives may include general education courses and/or career and technical education courses.
5. You must complete at least 30 hours of approved General Education Credits. At least 15 hours must be completed at PCC.
6. There must be at least 15 credits of GT Pathways courses in the 60 credit hours of the degree

Written Communication (minimum 3 credit hours)

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
ENG 131	Technical Writing I: CO1	3

Arts and Humanities (minimum 3 credit hours)

GT Pathways Arts and Humanities course (AH1, AH2, AH3, AH4)		
or		
ARA 111	Arabic Language I	5
ARA 112	Arabic Language II	5
ARA 211	Arabic Language III	3
ART 113	History of Photography	3
ASL 121	American Sign Language I	5
ASL 122	American Sign Language II	5
CHI 111	Chinese Language I	5
FRE 111	French Language I	5
FRE 112	French Language II	5
GER 111	German Language I	5
GER 112	German Language II	5
ITA 111	Italian Language I	5
ITA 112	Italian Language II	5
JPN 111	Japanese Language I	5
JPN 112	Japanese Language II	5
LIT 255	Children's Literature: AH2	3
RUS 111	Russian Language I	5
RUS 112	Russian Language II	5
SPA 111	Spanish Language I	5
SPA 112	Spanish Language II	5

Mathematics (minimum 3 credit hours)

Any course 100 level and over

Social and Behavioral Sciences (minimum 3 credit hours)

GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)		
or		
COM 115	Public Speaking	3
COM 125	Interpersonal Communication	3
COM 217	Group Communication	3
COM 225	Organizational Communication	3

FIN 106	Consumer Economics	3
PSY 112	Psychology of Adjustment	3

Natural and Physical Sciences (minimum 3 credit hours)

GT Pathways Natural and Physical Sciences course (SC1, SC2)		
or		
HWE 100	Human Nutrition	3

Additional General Education Electives (15 credit hours)

To include:

• GT Pathways courses AH1, AH2, AH3, AH4, CO1, CO2, CO3, HI1, MA1, SC1, SC2, SS1, SS2, SS3		
BUS 115	Introduction to Business	3
CIS 115	Introduction to Computer Information Systems	3
CIS 118	Introduction to PC Applications	3
CSC 105	Computer Literacy	3
CSC 120	Problem Solving with (Software Package)	3

Electives (30 credit hours). Any course 100 and higher to include AAA 109.

Emergency Management & Planning

Associate of General Studies Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

The AGS in Emergency Management and Planning offers students an option of study to satisfy the associate degree requirements for entry into the PCC BAS Emergency Service Administration degree without having to complete specific discipline requirements in fire science, emergency medical services, and criminal justice. Students will obtain approximately 30 general education and/or guaranteed transfer credits toward an associate degree as well as 30 additional credits focused on preparation for the BAS Emergency Service Administration degree at Pikes Peak Community College. The general education courses are offered both on campus and online, while the EMP and PSM courses are offered online only.

Requirements

1. 60 credit hours minimum of course work.
2. A cumulative grade point average of 2.0 (a C average).
3. Students must take the courses designated for this the AGS/EMP degree plan. Exceptions must be approved by the department chair.

Program Learning Outcomes

Upon completion of the Emergency Management and Planning degree program, students should be able to:

- Assess emergency situations for optimal outcomes
- Analyze the emergency management framework, principles, and body of knowledge in relation to a crisis scenario
- Analyze the geographic configurations of hazards, vulnerabilities, and risks in relation to their impact on sociocultural norms
- Appraise current evolving technologies and their relevant application to practice
- Evaluate interconnections between emergency management disciplines in varying emergency situations

Written Communication

Six (6) credit hours

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3

Mathematics

Four (4) credit hours

MAT 120	Mathematics for the Liberal Arts: MA1	4
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Arts and Humanities

Three (3) credit hours

PHI 112	Ethics: AH3	3
PHI 113	Logic: AH3	3
PHI 205	Business Ethics: AH3	3
PHI 218	Environmental Ethics: AH3	3

Social and Behavioral Sciences

Three (3) credit hours

COM 115	Public Speaking	3
COM 125	Interpersonal Communication	3

Natural and Physical Sciences

Four (4) credit hours

ENV 101	Environmental Science w/Lab: SC1	4
GEO 112	Physical Geography: Weather, Climate & Ecosystems w/Lab: SC1	4
GEY 135	Environmental Geology w/Lab: SC1	4

Additional Required Courses

Thirty (30) credit hours

CRJ 125	Policing Systems	3
CRJ 220	Human Relations & Social Conflict	3
EMP 101	Emergency Management	3
EMP 105	Emergency Planning	3
EMP 106	Exercise Design Evaluation	3
EMP 107	Emergency Operations Center & Communications	3
EMS 115	Emergency Medical Responder	3
or		
COM 115	Public Speaking	(3)
or		
COM 125	Interpersonal Communication	(3)
or		
JOU 105	Introduction to Mass Media: SS3	(3)
or		
JOU 106	Media News & Reporting	(3)
or		
MAN 125	Team Building	(3)
or		
MAN 226	Principles of Management	(3)
FST 102	Principles/Emergency Services	3
PSM 137	Introduction to Mitigation	3
PSM 200	National Incident Management System/ Interagency Operations	3

Electives

Ten (10) credit hours

BUS 115	Introduction to Business	3
CSC 105	Computer Literacy	3
HWE 103	Community First Aid & CPR	1
POS 111	American Government: SS1	3
PSY 101	General Psychology I: SS3	3
PSY 102	General Psychology II: SS3	3
PSY 226	Social Psychology: SS3	3
SOC 101	Introduction to Sociology I: SS3	3
SOC 102	Introduction to Sociology II: SS3	3

Total Credit Hours 60

Hospitality

Associate of General Studies Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

The Hospitality AGS degree will prepare the student to both enter the hospitality industry while also completing courses that transfer toward a Bachelor Degree in Hospitality Management at a four-year university. Students will learn skills in business, customer service, operations, supervision, event planning, marketing, accounting, revenue, and facility management.

Requirements:

1. 60 credit hours minimum of course work.
2. A cumulative grade point average of 2.0 (a C average).
3. Students must take the courses designated for the AGS/HOS degree plan. Exceptions must be approved by the department chair.

Program Learning Outcomes

Upon completion of the Hospitality degree program, students should be able to:

- Employ inventory management, purchasing and costing
- Identify the steps for planning and managing various events
- Develop business writing and oral communication reports
- Identify how multiple departments coordinate and interact for optimal results within a property
- Solve hospitality accounting tasks, to include revenue management analysis
- Describe, explain, and identify the facility management of varied departments within multiple types of hospitality establishments

Written Communication

Three (3) credit hours

ENG 121	English Composition I: CO1	3
or		
ENG 131	Technical Writing I: CO1	(3)

Mathematics

Three (3) credit hours

MAT 135	Introduction to Statistics: MA1	3
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Arts and Humanities

Three (3) credit hours

PHI 205	Business Ethics: AH3	3
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Social and Behavioral Sciences

Three (3) credit hours

COM 115	Public Speaking	3
or		
COM 125	Interpersonal Communication	(3)

Natural and Physical Sciences

Three (3) credit hours

HWE 100	Human Nutrition	3
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Additional Required Courses

Forty-five (45) credit hours

ACC 101	Fundamentals of Accounting	3
BUS 115	Introduction to Business	3
BUS 217	Business Communication & Report Writing	3
CIS 115	Introduction to Computer Information Systems	3
	or	
CIS 118	Introduction to PC Applications	(3)
	or	
CSC 105	Computer Literacy	(3)
HIS 112	The World: 1500-Present: HI1	3
	or	
	GT Pathways History Course	(3)
HOS 131	Planning for Special Events	3
HOS 148	Introduction to Food and Beverage	3
HOS 221	Basic Hotel and Restaurant Accounting	3
HOS 226	Supervision in the Hospitality Industry	3
HOS 231	Resort Facilities Management & Design	3
HOS 251	Hotel Operations	3
HOS 280	Internship	3
MAR 160	Customer Service	3
POS 125	American State & Local Government	3
SOC 101	Introduction to Sociology I: SS3	3
Total Credit Hours		60

Associate of Applied Science Degrees (AAS) and Certificates

The two-year AAS degree provides career skills to enable students to enter the job market after graduation, retrain in a new career, or upgrade employment skills. Occupational courses are designed to meet these needs instead of transferring to four-year institutions; however, many four-year institutions accept some of these courses. Check with the receiving institution if planning to transfer these courses.

Occupational training is available in fewer than two years through our certificate programs. Certificates are awarded for several types of training outlined in the next section of this catalog. Certificate programs vary in length from one to three academic terms.

AAS Requirements

1. A minimum of 60 credit hours in a prescribed program of study with a cumulative grade point average of 2.0 (a C average). At least 15 of these credit hours must be earned from PPCC. See specific degree program for additional requirements. Credits must have been earned within 10 years.
2. A minimum of 15 credit hours (of the 60 total) of general education courses from the General Education Electives for AAS Degrees and Certificates list will be chosen by the faculty for specific degrees.
3. Degree is intended to prepare students to enter skilled and/or paraprofessional occupations and is not intended for transfer toward a Bachelor's degree; however, some courses may transfer to some institutions. Academic advisors should be consulted for further information.
4. Courses used as electives in meeting degree requirements and taken in addition to those courses specified in a particular program are not accepted toward this degree without approval of the Vice President for Instructional Services. Approval is given only when it is appropriate to the educational objectives of a student.
5. A maximum of four (4) credit hours in any combination of PED activity courses.
6. Specific degree requirements are listed with each program in the next section of this catalog.
7. Courses numbered below 100 normally may not apply toward degrees.

Certificate Requirements

1. Satisfactory completion of a prescribed program of study with a cumulative grade point average of 2.0 (a C average).
2. A minimum of six (6) credit hours in the area of specialization earned from PPCC for programs requiring six (6) hours or more. Credits must have been earned within 10 years. Credits earned over ten years will be evaluated on a course-by-course basis.
3. Courses numbered below 100 normally may not apply toward certificate.

General Education Electives for AAS Degrees and Certificates

These courses are approved as meeting the general education electives requirements for the AAS degree.

Written Communication

COM 115	Public Speaking	3
COM 125	Interpersonal Communication	3
COM 217	Group Communication	3
COM 225	Organizational Communication	3
ENG 115	Technical English & Communication	3
ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
ENG 131	Technical Writing I: CO1	3
ENG 132	Technical Writing II	3

Arts and Humanities

ARA 111	Arabic Language I	5
ARA 112	Arabic Language II	5
ARA 211	Arabic Language III	3
ART 110	Art Appreciation: AH1	3
ART 111	Art History Ancient to Medieval: AH1	3
ART 112	Art History Renaissance to 1900: AH1	3
ART 113	History of Photography	3
ART 242	Alternative Photo Processes	3
ASL 121	American Sign Language I	5
ASL 122	American Sign Language II	5
CHI 111	Chinese Language I	5
DAN 125	History of Dance I: AH1	3
DAN 143	Tap I	1
DAN 144	Tap II	1
DAN 226	Pointe	1
DAN 227	Pointe II	1
DAN 254	Methods of Teaching Dance	2
DAN 255	Dance for Camera	2
FRE 101	Conversational French	3
FRE 111	French Language I	5
FRE 112	French Language II	5
FRE 211	French Language III: AH4	3
FRE 212	French Language IV: AH4	3
GER 111	German Language I	5
GER 112	German Language II	5
GER 211	German Language III: AH4	3
GER 212	German Language IV: AH4	3
HUM 103	Introduction to Film Art: AH2	3
HUM 115	World Mythology: AH2	3
HUM 121	Early Civilization: AH2	3
HUM 122	Medieval - Modern: AH2	3
HUM 123	Modern World: AH2	3
ITA 111	Italian Language I	5
ITA 112	Italian Language II	5
ITA 211	Italian Language III: AH4	3
ITA 212	Italian Language IV: AH4	3
JPN 101	Conversational Japanese I	3
JPN 111	Japanese Language I	5
JPN 112	Japanese Language II	5
JPN 211	Japanese Language III: AH4	3
JPN 212	Japanese Language IV: AH4	3
LIT 115	Introduction to Literature I: AH2	3
LIT 201	World Literature to 1600: AH2	3
LIT 202	World Literature after 1600: AH2	3
LIT 205	Ethnic Literature: AH2	3
LIT 211	American Literature to Civil War: AH2	3
LIT 212	American Literature after the Civil War: AH2	3
LIT 221	British Literature to 1770: AH2	3
LIT 222	British Literature since 1770: AH2	3
LIT 246	Literature of Women: AH2	3
LIT 268	Celtic Literature: AH2	3

MUS 100	Music Theory Fundamentals I	3	ENV 101	Introduction to Environmental Science: SC1	4
MUS 105	Introduction to Computer Applications	3	GEO 111	Physical Geography: Landforms w/Lab: SC1	4
MUS 120	Music Appreciation: AH1	3	GEY 108	Geology of U.S. National Parks: SC2	3
MUS 121	Music History Medieval thru Classical: AH1	3	GEY 111	Physical Geology w/Lab: SC1	4
MUS 122	Music History Early Romantic Period to the Present: AH1	3	GEY 112	Historical Geology w/Lab: SC1	4
PHI 111	Introduction to Philosophy: AH3	3	GEY 135	Environmental Geology w/Lab: SC1	4
PHI 112	Ethics: AH3	3	HWE 100	Human Nutrition	3
PHI 113	Logic: AH3	3	HWE 103	Community First Aid & CPR	1
PHI 114	Comparative Religions: AH3	3	MAT 103	Math for Clinical Calculations	3
PHI 115	World Religions-West: AH3	3	MAT 107	Career Math	3
PHI 116	World Religions-East: AH3	3	MAT 112	Financial Mathematics	3
PHI 205	Business Ethics: AH3	3	MAT 121	College Algebra: MA1	4
PHI 214	Philosophy of Religion: AH3	3	MAT 135	Introduction to Statistics: MA1	3
PHO 205	Professional Digital Photo I	3	MAT 204	Calculus III with Engineering Applications: MA1	5
RUS 111	Russian Language I	5	PHY 111	Physics: Algebra-Based I w/Lab: SC1	5
RUS 112	Russian Language II	5	PHY 112	Physics: Algebra-Based II w/Lab: SC1	5
RUS 211	Russian Language III: AH4	3	Social and Behavioral Sciences		
RUS 212	Russian Language IV: AH4	3	ANT 101	Cultural Anthropology: SS3	3
SPA 101	Conversational Spanish I	3	ANT 107	Introduction to Archaeology: SS3	3
SPA 102	Conversational Spanish II	3	ANT 215	Native Peoples of North America: SS3	3
SPA 109	Spanish for Travelers	2	ANT 221	Exploring Other Cultures I	3
SPA 111	Spanish Language I	5	ANT 222	Exploring Other Cultures II	3
SPA 112	Spanish Language II	5	ANT 225	Anthropology of Religion: SS3	3
SPA 115	Spanish for the Professional I	3	ANT 260	Sex, Gender & Culture	3
SPA 211	Spanish Language III: AH4	3	CRJ 110	Introduction to Criminal Justice: SS3	3
SPA 212	Spanish Language IV: AH4	3	ECO 201	Principles of Macroeconomics: SS1	3
THE 105	Theatre Appreciation: AH1	3	ECO 202	Principles of Microeconomics: SS1	3
THE 211	Development of Theatre Greek-Renaissance: AH1	3	ECO 245	Environmental Economics: SS1	3
THE 212	Development of Theatre Restoration to Modern: AH1	3	GEO 105	World Regional Geography: SS2	3
History			GEO 106	Human Geography: SS2	3
HIS 101	Western Civilization: Antiquity-1650: HI1	3	JOU 105	Introduction to Mass Media: SS3	3
HIS 102	Western Civilization: 1650-Present: HI1	3	POS 105	Introduction to Political Science: SS1	3
HIS 111	The World: Antiquity-1650: HI1	3	POS 111	American Government: SS1	3
HIS 112	The World: 1650-Present: HI1	3	POS 125	American State & Local Government: SS1	3
HIS 121	U.S. History to Reconstruction: HI1	3	POS 205	International Relations: SS1	3
HIS 122	U.S. History since the Civil War: HI1	3	POS 215	Current Political Issues: SS1	3
HIS 203	Civil War Era in American History: HI1	3	PSY 100	Psychology of Workplace Relationships	3
HIS 208	American Indian History: HI1	3	PSY 101	General Psychology I: SS3	3
HIS 218	History of Science & Technology: HI1	3	PSY 102	General Psychology II: SS3	3
HIS 225	Colorado History: HI1	3	PSY 112	Psychology of Adjustment	3
HIS 235	History of the American West: HI1	3	PSY 235	Human Growth & Development: SS3	3
HIS 236	U.S. History Since 1945: HI1	3	PSY 265	Psychology of Personality: SS3	3
HIS 243	History of Modern China: HI1	3	SOC 101	Introduction to Sociology I: SS3	3
HIS 247	20th Century World History: HI1	3	SOC 102	Introduction to Sociology II: SS3	3
HIS 249	History of Islamic Civilization: HI1	3	SOC 205	Sociology of Family Dynamics: SS3	3
HIS 251	The History of Christianity in the World: HI1	3	SOC 216	Sociology of Gender: SS3	3
HIS 255	The Middle Ages: HI1	3	SOC 218	Sociology of Diversity: SS3	3
HIS 259	Modern Middle East: HI1	3	SOC 220	Sociology of Religion: SS3	3
Mathematics and Physical and Life Sciences			SOC 231	The Sociology of Deviant Behavior: SS3	3
ANT 111	Biological Anthropology w/Lab: SC1	4	WST 200	Introduction to Women's Studies: SS3	3
AST 101	Planetary Astronomy w/Lab: SC1	4	Other General Electives		
AST 102	Stellar Astronomy w/Lab: SC1	4	BUS 115	Introduction to Business	3
BIO 104	Biology: A Human Approach: SC1	4	CIS 115	Introduction to Computer Information Systems	3
BIO 105	Science of Biology w/Lab: SC1	4	CIS 118	Introduction to PC Applications	3
BIO 106	Basic Anatomy & Physiology	4	CSC 120	Problem Solving with (Software Package)	3
BIO 111	General College Biology I w/Lab: SC1	5	REC 100	Introduction to Recreation	2
BIO 112	General College Biology II w/Lab: SC1	5			
BIO 148	Basic Ecology	4			
BIO 201	Human Anatomy & Physiology I w/Lab: SC1	4			
BIO 202	Human Anatomy & Physiology II w/Lab: SC1	4			
BIO 204	Microbiology w/Lab: SC1	4			
BIO 224	Genetics: SC1	4			
CHE 101	Introduction to Chemistry I w/Lab: SC1	5			
CHE 102	Introduction to Chemistry II w/Lab: SC1	5			
CHE 111	General College Chemistry I w/Lab: SC1	5			
CHE 112	General College Chemistry II w/Lab: SC1	5			

Associate of Applied Sciences Degree Programs and Certificates

Accounting

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Graduates of this program are prepared to enter an accounting career. Accountants work for business, industry, and various governmental agencies.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

Program Learning Outcomes

Upon completion of the Accounting degree program, students should be able to:

- Perform each of the steps of the accounting cycle
- Apply basic managerial accounting concepts, including costing systems, budgets, and cost-volume-profit analysis
- Apply ethical principles to solve accounting dilemmas
- Perform basic accounting functions using Excel
- Use QuickBooks in a business setting
- Process payroll manually
- Analyze individual taxpayer scenarios in order to prepare Income tax returns, using the current internal revenue code
- Apply basic managerial accounting concepts, including costing systems
- Communicate accounting concepts adequately in written format

General Education Courses

CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
COM 115	Public Speaking	3
ECO 201	Principles of Macroeconomics: SS1	3
ENG 121	English Composition I: CO1	3
or		
ENG 131	Technical Writing I: CO1	(3)
MAT 112	Financial Mathematics or higher	3
		<u>15</u>

Additional Required Courses

ACC 115	Payroll Accounting	3
ACC 121	Accounting Principles I	4
ACC 122	Accounting Principles II	4
ACC 125	Computerized Accounting	3
ACC 131	Income Tax	3
or		
ACC 132	Tax Help Colorado	(2)
and		
ACC 133	Tax Help Colorado Practicum	(1)
ACC 211	Intermediate Accounting I	4
ACC 226	Cost Accounting	3
BUS 115	Introduction to Business	3
BUS 216	Legal Environment of Business	3
BUS 217	Business Communication & Report Writing	3

CIS 155	Complete Spreadsheets: (Software package)	3
Elective	Choose nine to ten (9-10) hours from list below	<u>9-10</u>
		45-46

Total Credit Hours 60-61

Electives

ACC 135	Spreadsheet Applications for Accounting	3
ACC 212	Intermediate Accounting II	4
ACC 216	Governmental & Not-for-Profit Accounting	3
ACC 287	Cooperative Education	3
BUS 226	Business Statistics	3
CIS 267	Management of Information Systems	3
ECO 202	Principles of Microeconomics: SS1	3
FIN 201	Principles of Finance	3
MAN 200	Human Resource Management I	3
MAN 226	Principles of Management	3
MAR 216	Principles of Marketing	3
PHI 112	Ethics: AH3	3
PHI 205	Business Ethics: AH3	3

Certificates

Accounting

The accounting certificate program is designed to allow students to become proficient in using the computer for basic bookkeeping and spreadsheet applications. Students will also be prepared to accomplish normal office procedures.

Program Learning Outcomes

Upon completion of the Accounting certificate program, students should be able to:

- Utilize computer applications to perform accounting functions
- Employ basic accounting procedures
- Perform payroll procedures in accordance with applicable laws and regulations
- Analyze and interpret both managerial and financial accounting information
- Prepare federal and state income tax returns for individuals

ACC 115	Payroll Accounting	3
ACC 121	Accounting Principles I	4
ACC 122	Accounting Principles II	4
ACC 125	Computerized Accounting	3
BUS 115	Introduction to Business	3
or		
ACC 132	Tax Help Colorado	(2)
and		
ACC 133	Tax Help Colorado Practicum	(1)
CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
CIS 155	Complete Spreadsheets: (Software package)	3
MAT 112	Financial Mathematics or higher	3
Elective	Choose three to four (3-4) hours from list below	<u>3-4</u>

Total Credit Hours 29-30

Electives

ACC 131	Income Tax	3
or		
ACC 132	Tax Help Colorado	(2)
and		
ACC 133	Tax Help Colorado Practicum	(1)
ACC 135	Spreadsheet Applications for Accounting	3
ACC 287	Cooperative Education	3
BTE 100	Computer Keyboarding	1
BTE 108	Ten-Key by Touch	1

BUS 216	Legal Environment of Business	3
BUS 217	Business Communication & Report Writing	3
COM 115	Public Speaking	3
ENG 121	English Composition I: CO1	3
	or	
ENG 131	Technical Writing I: CO1	(3)
FIN 106	Consumer Economics	3
MAN 116	Principles of Supervision	3

Bookkeeping Applications

This certificate in bookkeeping applications will familiarize students with the general accounting and computer skills necessary in performing basic bookkeeping duties for small business and personal use.

Program Learning Outcomes

Upon completion of the Bookkeeping Applications certificate program, students should be able to:

- Utilize computer applications to perform accounting and other office functions
- Perform payroll procedures in accordance with applicable laws and regulations
- Use the ten-key and various office application software programs

ACC 115	Payroll Accounting	3
ACC 121	Accounting Principles I	4
	or	
ACC 101	Fundamentals of Accounting	(3)
	and	
BTE 108	Ten-Key by Touch	(1)
ACC 125	Computerized Accounting	3
BUS 115	Introduction to Business	3
CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
Total Credit Hours		16

Additional information available on the Accounting Department website at www.pgcc.edu/ACC.

Allied Health

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

This degree program is intended to introduce students to a variety of potential career paths in allied health. Students will complete certifications in several areas including: Phlebotomy, CNA and EMT-Basic. Students are given the opportunity to progress to higher levels of study in multiple medical fields.

Program Learning Outcomes

Upon completion of the Allied Health degree program, students should be able to:

- Describe the health care system
- Apply medical terminology appropriately
- Apply medical clinical skills to a variety of scenarios
- Assist patients in their health care

General Education Courses

COM 125	Interpersonal Communication	3
	or	
COM 225	Organizational Communication	(3)
ENG 121	English Composition I: CO1	3
	or	
ENG 131	Technical Writing I: CO1	(3)
MAT 107	Career Math	3
	or	
MAT 112	Financial Mathematics	(3)
PSY 101	General Psychology I: SS3	3
SPA 101	Conversational Spanish	3
	or	
WOL	World Language Course	(3)
		<u>15</u>

Additional Required Courses

EMS 121	EMT Fundamentals	3
EMS 122	EMT Medical Emergencies	4
EMS 123	EMT Trauma Emergencies	2
EMS 124	EMT Special Considerations	2
EMS 170	EMT Clinical	1
HPR 101	Customer Service in Healthcare	2
HPR 102	CPR for Professionals	0.5
HPR 106	Law & Ethics for Health Professionals	2
HPR 112	Phlebotomy	4
HPR 113	Advanced Phlebotomy	4
HPR 139	Medical Terminology	2
HPR 143	Orientation to Health Careers	3
HPR 208	Medical Terminology for the Electronic Health Professional	2
MOT 125	Basic Medical Sciences I	3
MOT 133	Basic Medical Sciences II	3
MOT 135	Basic Medical Sciences III	3
NUA 101	Nurse Aide Health Care Skills	4
NUA 170	Nurse Assistant Clinical Experience	1
NUA 171	Clinical: Advanced Nurse Aide	1
		<u>46.5</u>
Total Credit Hours		61.5

Additional information available on the Allied Health Department website at www.pgcc.edu/degrees-certificates/Allied-Health.

Architectural Engineer / Construction Management

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

The building construction industry is very broad and encompassing, offering many diverse and satisfying career options where students can explore and discover their fitting involvement. This program provides the technical training and preparation for students to participate as a valuable contributor in architectural, engineering, and construction firms. Alternatively, if the technical training is complemented by marketing skills, the student will obtain a basis to engage in the world of construction product sales. In order to attend to the wide-ranging career options available, the program has a three-part emphasis, Architectural Engineer, Construction Management, and Product Representative.

Career opportunities include architectural and engineering technician, draftsman, certified document technician, construction project engineer, quantity surveying and sales. With

additional equipping and/or education, additional career options include licensed professional architect, engineer, landscape designer, urban planner, general contractor, construction estimator, project manager, and building inspector.

This option focuses on sales, advertising, and bidding for product manufacturers. With the appropriate CAD training, this option could include preparation of shop and fabrication drawings attendant to construction materials/products.

Program Learning Outcomes

Upon completion of the Architectural Engineer / Construction Management degree program, students should be able to:

- Read architectural prints, solve common architectural problems, perform and support estimating functions, including national quantity, types, costs and estimates, labor requirements, equipment, and scheduling functions
- Use with efficiency the latest 2D and 3D CAD software programs to create industry-standard architectural drawings, both constructional and presentational using the drafting conventions including symbols, linetypes, lineweights, and dimension styles as applicable to the design discipline
- Draw objects of various orientations as may be prescribed, draw sections and elevations of objects, and identify the relationships of objects or object features to demonstrate interpretation and visualization proficiency using drafting industry standards
- Identify or describe the typical characteristics and uses of common construction materials, products, and systems, document them in drawings, and make appropriate selections based on design project requirements
- Produce a comprehensive set of construction documents using architectural construction drawings to design a residence or small commercial building
- Describe the role and purpose of building codes and standards as they pertain to the life, health, and safety of the public
- Collaborate with other designers or technicians working cooperatively and equitably to overcome challenges of design problems and meet project goals while adapting to different working environments

General Education Courses

CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
COM 225	Organizational Communication	(3)
ENG 131	Technical Writing I: CO1 or higher	3
MAT 107	Career Math or higher	3
	Choose three (3) hours from list below	3
		<u>15</u>

Choose three (3) credit hours

PSY 100	Psychology of Workplace Relationships	3
PSY 101	General Psychology I: SS3	3
SPA 101	Conversational Spanish I	3

Additional Required Courses for all Emphasis Areas

AEC 102	Residential Construction Drawing	4
AEC 104	Architectural Drawing Theory	4
AEC 107	Print Reading Residential/Commercial	3
AEC 121	Construction Material & Systems	3
AEC 122	Construction Practices & Documents	2
AEC 218	Sustainable Building Systems	3
AEC 236	International Building Codes	3
CAD 104	CAD for Architecture	4
CAD 224	Revit Architecture	3
		<u>29</u>

Emphasis Areas

Architectural Engineer Technician

Students choosing this option are trained to be paraprofessionals in architectural, engineering, and construction offices with primary skills of architectural drawing and construction assembly technology. Assisting with the design of residential and commercial buildings in an architectural or construction office. Subject matter such as design principles, technical drawing, print reading, construction document organization, and construction materials and methods are included. An architectural job captain will be responsible for organizing all of the drawings and coordinating the building materials and systems specifications.

AEC 123	Commercial Construction Drawing	4
AEC 125	History of Architecture	3
AEC 225	Architectural Design & Development	3
AEC 255	Professional Seminar & Portfolio	3
CAD 227	Advanced Revit Architecture	3
		<u>17</u>

Total Hours for Architectural Engineer Technician Degree Emphasis 61

Construction Management Technician

Students choosing this option will primarily work for a construction company in an administrative capacity doing estimating, scheduling, project management, construction assembly technology, and job-site problem solving for the building industry. While project managers and engineers work from a main office, project supervisors work out of a field office at the construction site, where they monitor the project and make daily decisions about construction activities.

AEC 216	Construction Estimating	3
AEC 226	Construction Scheduling	3
AEC 232	Construction Project Management	3
AEC 233	Construction Safety & Loss Prevention	2
AEC 255	Professional Seminar & Portfolio	3
CAD 227	Advanced Revit Architecture	3
		<u>17</u>

Total Hours for Construction Management Technician Degree Emphasis 61

Product Representative

Students choosing this business-oriented option will learn basic selling and marketing techniques associated with construction materials/products. Other items covered include estimating, bid submittals, and furnishing technical information to professionals in the building industry. This option focuses on sales, advertising, and bidding for product manufacturers. With the appropriate CAD training, this option could include preparation of shop and fabrication drawings attendant to construction materials/products.

AEC 216	Construction Estimating	3
AEC 226	Construction Scheduling	3
AEC 255	Professional Seminar & Portfolio	3
BUS 115	Introduction to Business	3
BUS 216	Legal Environment of Business	3
MAR 111	Principles of Sales	3
MAR 216	Principles of Marketing	3
		<u>21</u>

Total Hours for Product Representative Degree Emphasis 65

Electives

AEC 123	Commercial Construction Drawing	4
AEC 216	Construction Estimating	3
AEC 226	Construction Scheduling	3

AEC 233	Construction Safety & Loss Prevention	2	AEC 107	Print Reading Residential/Commercial	3
AEC 280	Internship	3	CAD 104	CAD for Architecture	4
OSH 126	30-HR Construction Safety	3	CAD 224	Revit Architecture	3
				Total Credit Hours	18

Certificates

Architecture Professional

The Architecture Professional certificate is designed to provide students with technical training, preparing them to participate in architectural, engineering, and construction firms. Students learn how to interpret construction drawings; produce a design solution through a combination of research data, conceptual models, drawings, and sketches. Additionally, students learn about restrictions, standards, and requirements that have been established by law to govern the construction of buildings and their materials.

Program Learning Outcomes

Upon completion of the Architecture Professional certificate program, students should be able to:

- Interpret construction documents (e.g., mechanical systems, floor plans, door, and window schedules)
- Solve common architectural problems, perform and support estimating functions, including quantity take-off, estimate types, costs, labor requirements, equipment, and scheduling functions
- Produce residential and small commercial construction drawings based on building specifications (e.g., construction materials, structural systems, building techniques) using 2D AutoCAD and 3D AutoDesk Revit software
- Describe the role and purpose of building codes and standards as they pertain to the life, health, and safety of the public
- Produce and present design solutions in a visually artistic and professional manner

AEC 107	Print Reading Residential/Commercial	3
AEC 121	Construction Material & Systems	3
AEC 123	Commercial Construction Drawing	4
AEC 125	History of Architecture	3
AEC 225	Architectural Design & Development	4
AEC 236	International Building Codes	3
AEC 255	Professional Seminar & Portfolio	3
Total Credit Hours		23

Basic AEC Drafting

The Basic AEC Drafting certificate prepare students for employment in architectural, engineering, and construction firms. Students learn about light frame construction techniques, the production of residential construction drawings, residential construction materials, components and systems related to wood frame structures, 2D architectural computer aided drafting skills using the AutoCAD software and how to produce construction document set.

Program Learning Outcomes

Upon completion of the Basic AEC Drafting certificate program, students should be able to:

- Interpret construction documents (e.g., mechanical systems, floor plans, door, and window schedules)
- Produce residential construction drawings based on building specifications (e.g., construction materials, structural systems, building techniques) using 2D AutoCAD and 3D AutoDesk Revit software

AEC 102	Residential Construction Drawing	4
AEC 104	Architectural Drawing Theory	4

Construction Professional

The Construction Professional certificate prepare students for employment in architectural, engineering, and construction firms. Students learn how to interpret construction drawings and estimate the cost of various construction projects. In addition, students learn about building materials, construction techniques, and regulations and standards governing the construction of buildings and their materials.

Program Learning Outcomes

Upon completion of the Construction Professional certificate program, students should be able to:

- Interpret construction documents (e.g., mechanical systems, floor plans, door, and window schedules)
- Solve common architectural problems, perform and support estimating functions, including quantity take-off, estimate types, costs, labor requirements, equipment, and scheduling functions
- Produce residential construction drawings based on building specifications (e.g., construction materials, structural systems, building techniques) using 2D AutoCAD and 3D AutoDesk Revit software
- Describe the role and purpose of building codes and standards as they pertain to the life, health, and safety of the public
- Estimate amounts and costs for representative types of construction
- Create construction schedule using the critical path method
- Formulate a construction safety and loss prevention program
- Produce and present design solutions in a visually artistic and professional manner

AEC 107	Print Reading Residential/Commercial	3
AEC 121	Construction Material & Systems	3
AEC 216	Construction Estimating	3
AEC 226	Construction Scheduling	3
AEC 233	Construction Safety & Loss Prevention	2
AEC 236	International Building Codes	3
AEC 255	Professional Seminar & Portfolio	3
Total Credit Hours		20

Additional information available on the Architectural Engineer / Construction Management Department website at www.pcc.edu/degrees-certificates/architecture.

Automotive Collision Technology

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

This program prepares students to enter into, or upgrade skills in, auto collision repair. Students have the opportunity to develop skills in non-structural metal repair, structural repair, and all aspects of refinishing. Students who complete a certificate program are prepared to enter into a specific area of the collision repair industry. The degree program provides students with a broader background and training in all areas of auto collision repair. Students completing either a degree or certificate program

should have little difficulty in finding employment. The program utilizes late-model vehicles for training purposes and is certified by the National Institute for Automotive Service Excellence (ASE).

Students must provide their own work clothes and hand tools. A complete set of collision repair tools should be purchased before job entry.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

Additionally, students should work with a program faculty advisor to ensure that they are taking the correct classes for their program.

Program Learning Outcomes

Upon completion of the Automotive Collision Technology degree program, students should be able to:

- Follow auto collision shop safety requirements
- Straighten a common dent in preparation for refinish operations
- Prepare an automotive panel for refinish operations
- Perform a refinish blend operation on an automotive panel

General Education Courses

CIS 118	Introduction to PC Applications	3
COM 225	Organizational Communication	3
MAT 107	Career Math	3
Elective	AAS General Education Elective course	6
		<hr/> 15

Additional Required Courses for all Emphasis Areas

ACT 101	Introduction to Automotive Collision Technology	4
ACT 111	Metal Welding & Cutting I	3
ACT 121	Non-Structural Repair Preparation	3
ACT 122	Panel Repair & Replacements	3
ACT 123	Metal Finishing & Body Filling	3
ACT 131	Structural Damage Diagnosis	3
ACT 142	Surface Preparation I	2
ACT 143	Spray Equipment Operation	2
ACT 144	Refinishing I	2
ACT 151	Plastics & Adhesives I	1
ACT 232	Automotive Glass Repair	2
ACT 251	Plastics & Adhesives II	1
		<hr/> 29

Emphasis Areas

Collision

ACT 124	Replace Weld-On Exterior Panel	3
ACT 132	Structural Damage Repair	3
ACT 170	Automotive Collision Technology Lab Experiences I	4
ACT 180	Automotive Collision Repair Internship Level I	2
ACT 181	Automotive Collision Repair Level II Internship	2
ACT 215	Paintless Dent Repair	3
ACT 226	Production	4
		<hr/> 65

Customizing

ACT 160	Custom Painting	3
ACT 164	Hobbyist's Paint & Body	4
ACT 165	Automotive Body Customizing I	3
ACT 166	Automotive Body Customizing II	3
ACT 167	Automotive Body Customizing III	3
ACT 211	Metal Welding & Cutting	2
CAD 100	Print Reading for Computer Aided Drafting	3

CAD 255	SolidWorks/Mechanical	3
CAD 259	Advanced SolidWorks	3
		<hr/> 71

Total Credit Hours

Estimating

ACT 172	Automotive Collision Technology Lab Experiences III	4
ACT 180	Automotive Collision Repair Internship Level I	2
ACT 181	Automotive Collision Repair Level II Internship	2
ACT 205	Estimating & Shop Management	3
ACT 207	Customer Relations & Sales	2
ACT 226	Production	4
		<hr/> 61

Total Credit Hours

Mechanical

ASE 120	Basic Automotive Electricity	2
ASE 123	Starting & Charging System	2
ASE 140	Suspension & Steering I	2
ASE 141	Suspension & Steering II	2
ASE 221	Automotive & Diesel Body Electrical	2
ASE 240	Suspension & Steering III	2
ASE 265	Heating & Air Conditioning Systems	4
		<hr/> 62

Total Credit Hours

Refinish

ACT 160	Custom Painting	3
ACT 171	Automotive Collision Technology Lab Experiences II	4
ACT 180	Automotive Collision Repair Internship Level I	2
ACT 181	Automotive Collision Repair Level II Internship	2
ACT 226	Production	4
ACT 243	Refinishing II	2
ACT 244	Final Detail	2
		<hr/> 63

Total Credit Hours

Certificates

Customizing Technician

The Customizing Technician Certificate is designed for students to learn a variety of techniques and skills associated with appearance-related and performance related modifications, including bodywork modification, addition of accessories, modification of frame, engine rebuilding and replacement, exhaust system modification, and modification of engine power.

Program Learning Outcomes

Upon completion of the Customizing Technician certificate program, students should be able to:

- Analyze damage to determine appropriate methods for overall repair (e.g., appearance related modifications)
- Inspect, remove, and replace auto parts
- Perform modification of frame
- Complete modifications of vehicles and vehicle parts (e.g., modification of frame)

ACT 101	Introduction to Automotive Collision Technology	4
ACT 111	Metal Welding & Cutting I	3
ACT 121	Non-Structural Repair Preparation	3
ACT 122	Panel Repair & Replacements	3
ACT 123	Metal Finishing & Body Filling	3
ACT 124	Replace Weld-On Exterior Panel	3
ACT 165	Automotive Body Customizing I	3
ACT 166	Automotive Body Customizing II	3
ACT 167	Automotive Body Customizing III	3
ACT 211	Metal Welding & Cutting	2
		<hr/> 30

Total Credit Hours

Estimating & Blueprinting Technician

The Estimating & Blueprinting Technician Certificate is designed for students to learn a variety of skills related to work in automotive shops. Students learn how to prepare, repair, and replace automotive parts, as well as familiarize themselves with damage analysis, extent of damage, and sequence of repair. Students also learn about estimation, shop management, employee safety, and customer relations.

Program Learning Outcomes

Upon completion of the Estimating & Blueprinting Technician certificate program, students should be able to:

- Analyze damage to determine appropriate methods for overall repair
- Inspect, remove, and replace auto parts
- Perform entry-level shop management tasks (e.g., ordering supplies, writing estimates, placing work orders)
- Assist clients through the entire repair process (e.g., customer relations)

ACT 101	Introduction to Automotive Collision Technology	4
ACT 121	Non-Structural Repair Preparation	3
ACT 122	Panel Repair & Replacements	3
ACT 131	Structural Damage Diagnosis	3
ACT 180	Automotive Collision Repair Internship Level I	2
ACT 205	Estimating & Shop Management	3
ACT 207	Customer Relations & Sales	2
Total Credit Hours		20

Non-Structural Repair Technician

The Non-Structural Repair Technician Certificate is designed for students to learn damage analysis as well as a variety of techniques and skills associated with the restoration of damaged exterior panels to original integrity, function, and appearance. Students learn the proper use, selection, and safety procedures for tools and equipment.

Program Learning Outcomes

Upon completion of the Non-Structural Repair certificate program, students should be able to:

- Analyze damage to determine appropriate methods for overall repair (e.g., use of tools and equipment)
- Inspect, remove, and replace auto parts
- Perform restoration of exterior panels

ACT 101	Introduction to Automotive Collision Technology	4
ACT 111	Metal Welding & Cutting I	3
ACT 121	Non-Structural Repair Preparation	3
ACT 122	Panel Repair & Replacements	3
ACT 123	Metal Finishing & Body Filling	3
ACT 124	Replace Weld-On Exterior Panel	3
ACT 180	Automotive Collision Repair Internship Level I	2
Total Credit Hours		21

Plastics Repair Technician

The Plastics Repair Technician Certificate is designed for students to learn damage analysis as well as a variety of techniques and skills associated with the repair of damaged rigid and flexible plastic components. Students will also learn skills used to tint and blend panels, as well as procedures related to special coatings, and sheet molded compounds and proper adhesives.

Program Learning Outcomes

Upon completion of the Plastics Repair Technician certificate program, students should be able to:

- Analyze damage to determine appropriate methods for overall repair
- Inspect, remove, and replace auto parts
- Repair both sheet molded components and flexible plastic components
- Prepare and apply special coating

ACT 101	Introduction to Automotive Collision Technology	4
ACT 121	Non-Structural Repair Preparation	3
ACT 122	Panel Repair & Replacements	3
ACT 142	Surface Preparation I	2
ACT 151	Plastics & Adhesives I	1
ACT 243	Refinishing II	2
ACT 251	Plastics & Adhesives II	1
Total Credit Hours		16

R & I Technician

The R & I (removal and installation) Technician Certificate is designed for students to learn a variety of techniques and skills associated with the adjustment of and removal and installation of automotive parts, fixed glass, modular glass, panels, bumpers, etc. Students also learn about the use of adhesives, sound deadeners and welding methods.

Program Learning Outcomes

Upon completion of the R & I Technician certificate program, students should be able to:

- Analyze damage to determine appropriate methods for overall repair
- Inspect, remove, and replace auto parts
- Remove and replace modular and fixed glass (e.g., adhesive application and sound deadeners)

ACT 101	Introduction to Automotive Collision Technology	4
ACT 121	Non-Structural Repair Preparation	3
ACT 122	Panel Repair & Replacements	3
ACT 232	Automotive Glass Repair	2
Total Credit Hours		12

Refinish Prep Technician

The Refinish Prep Technician Certificate is designed for students to learn a variety of techniques and skills associated with work on motor vehicle surfaces, specifically preparing for the restoration of vehicle finishes following body work. Students also learn how to operate spray equipment, as well as the detailing procedures involved in paint refinishing of vehicles.

Program Learning Outcomes

Upon completion of the Refinish Prep Technician certificate program, students should be able to:

- Prepare surfaces for refinishing (e.g., removal of paint defects)
- Set up and operate spray gun equipment

ACT 101	Introduction to Automotive Collision Technology	4
ACT 142	Surface Preparation I	2
ACT 143	Spray Equipment Operation	2
ACT 181	Automotive Collision Repair Level II Internship	2
ACT 244	Final Detail	2
Total Credit Hours		12

Refinish Technician

The Refinish Technician Certificate is designed for students to learn a variety of techniques and skills associated with work on motor vehicle surfaces, specifically the preparation and application of paint to vehicles that have been repaired. Students also learn how to operate spray equipment, as well as skills used to tint and blend panels, and detailing procedures involved in paint refinishing of vehicles.

Program Learning Outcomes

Upon completion of the Refinish Technician certificate program, students should be able to:

- Prepare and refinish surfaces
- Set up and operate spray gun equipment
- Perform advanced painting skills (e.g., modifications of base coat/tints, application and blending to adjacent areas)

ACT 142	Surface Preparation I	2
ACT 143	Spray Equipment Operation	2
ACT 144	Refinishing I	2
ACT 181	Automotive Collision Repair Level II Internship	2
ACT 243	Refinishing II	2
ACT 244	Final Detail	2
		12

Total Credit Hours

12

Additional information available on the Automotive Collision Technology Department website at www.pccc.edu/degrees-certificates/auto-collision-technology.

Automotive Technology

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

The Automotive and Diesel Technology programs lead to an interesting and challenging career in the repair, service, sales, and supply fields. Two degrees are offered in this program: Automotive Technology and Automotive Technology with a Diesel emphasis. The Automotive Technology Degree has a specific focus on automotive service and repair. The Automotive Technology/Diesel emphasis focus is on light duty diesel powered vehicles. i.e.; automotive diesel and light trucks. Students also have the option to pursue a variety of automotive and diesel certificates.

Students entering this program should exhibit the following qualities: mechanical aptitude, ability to read and follow detailed instructions, enjoy precision work and problem solving.

Students are required to provide appropriate work clothing, safety glasses, and a basic set of hand tools. (See automotive program advisors for specifics).

Program Learning Outcomes

Upon completion of the Automotive Technology degree program, students should be able to:

- Diagnose and repair manual drive train systems including vibrations, shifting problems, and noises
- Diagnose and repair general engine concerns, including rough running engines, noises, lack of power and exhaust smoke
- Diagnose and repair starting and charging systems including no cranking, dead battery, alternator faults
- Diagnose and repair braking systems including: Traction control, Anti-lock, Active braking systems

General Education Courses

CIS 118	Introduction to PC Applications	3
COM 225	Organizational Communication	3
MAT 107	Career Math	3
Elective	AAS General Education Elective course	6
		15

Elective hours must meet general education requirements. See list of approved general education courses. Students must consult with advisors for selection of elective courses to enhance their employability.

Emphasis Areas

Automotive Technology

ASE 102	Introduction to the Automotive Shop	2
ASE 110	Automotive Brake Service I	2
ASE 111	Automotive Brake Service II	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Starting & Charging System	2
ASE 130	General Engine Diagnosis	2
ASE 132	Ignition System Diagnosis & Repair	2
ASE 134	Automotive Fuel & Emissions Systems I	2
ASE 140	Suspension & Steering I	2
ASE 141	Suspension & Steering II	2
ASE 150	Manual Drive Train & Axle Maintenance	2
ASE 151	Automotive Manual Transmission/Transaxles & Clutches I	2
ASE 152	Manual Transmission, Transaxles & Clutches II	2
ASE 160	Automotive Engine Repair	2
ASE 161	Automotive Engine Repair & Rebuild	3
ASE 210	Automotive Power & ABS Brake Systems	2
ASE 221	Automotive & Diesel Body Electrical	4
ASE 231	Automotive Computers & Ignition Systems	2
ASE 233	Auto Fuel Injection & Emissions Systems II	4
ASE 235	Driveability & Diagnosis	2
ASE 240	Suspension & Steering III	2
ASE 250	Automatic Transmission/Transaxle Service	1
ASE 265	Heating & Air Conditioning Systems	4
ASE 282	Internship: General	2
		54

Total Hours for Automotive Technology Degree Emphasis 69

Automotive Technology/Diesel

ASE 110	Automotive Brake Service I	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Starting & Charging System	2
ASE 132	Ignition System Diagnosis & Repair	2
ASE 140	Suspension & Steering I	2
ASE 151	Automotive Manual Transmission/Transaxles & Clutches I	2
ASE 161	Automotive Engine Repair & Rebuild	3
ASE 210	Automotive Power & ABS Brake Systems	2
ASE 231	Automotive Computers & Ignition Systems	2
ASE 233	Auto Fuel Injection & Emissions Systems II	4
ASE 240	Suspension & Steering III	2
ASE 265	Heating & Air Conditioning Systems	4
DPM 100	Introduction to Diesel Mechanics	2
DPM 101	Diesel Shop Orientation	2
DPM 103	Diesel Engines I	4
DPM 106	Diesel Fuel Systems	3
DPM 203	Diesel Engines II	4
DPM 206	Heavy Duty Brakes I	3
DPM 207	Heavy Duty Brakes II	3
DPM 210	Diesel Air Induction & Exhaust	2
DPM 222	H/D Lighting & Instrumentation	3
		55

Total Hours for Automotive Technology/Diesel Degree Emphasis 70

Certificates

Air Conditioning & Heating

The Air Conditioning & Heating Certificate is designed for students to learn the basics of shop safety and common shop equipment. Students learn about vehicle electricity and wiring diagrams, as well as starting and charging systems. The major emphasis is on the diagnosis, troubleshooting, and service of automotive heating and air conditioning systems and their components.

Program Learning Outcomes

Upon completion of the Air Conditioning & Heating certificate program, students should be able to:

- Diagnose and service vehicle heating and air conditioning systems and their components
- Test, service, and repair vehicle starting and charging systems

ASE 102	Introduction to the Automotive Shop	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Starting & Charging System	2
ASE 265	Heating & Air Conditioning Systems	4
Total Credit Hours		10

Automatic Transmissions

The Automatic Transmission Certificate is designed for students to learn the basics of shop safety and common shop equipment. Students learn about vehicle electricity and wiring diagrams, as well as starting and charging systems. The major emphasis is on practical methods of maintaining, servicing, and performing adjustments on automatic transmissions and transaxles. Students also learn principles related to hydraulics, power flow, theory of operation, and skills associated with the removal and installation of transmission/transaxle and replacement of components.

Program Learning Outcomes

Upon completion of the Automatic Transmissions certificate program, students should be able to:

- Diagnose, service, and replace automatic transmissions and transaxles
- Test, service, and repair vehicle starting and charging systems

ASE 102	Introduction to the Automotive Shop	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Starting & Charging System	2
ASE 250	Automatic Transmission/Transaxle Service	1
ASE 251	Automatic Transmission & Transaxle Repair	3
Total Credit Hours		10

Automotive Brakes

The Automotive Brakes Certificate is designed for students to learn the basics of shop safety and common shop equipment. Students learn about vehicle electricity and wiring diagrams, as well as starting and charging systems. The major emphasis is on the operation of automotive braking systems, including skills related to diagnosis, service, and repair of disc brakes, drum brakes, and basic hydraulic systems. Students learn to perform service checks and procedures associated with automotive braking systems, including anti-lock braking systems, power assist units, and machine operations of today's automobile.

Program Learning Outcomes

Upon completion of the Automotive Brakes certificate program, students should be able to:

- Diagnose, service, and repair anti-lock braking systems, power assist units, and traction control systems
- Test, service, and repair vehicle starting and charging systems

ASE 102	Introduction to the Automotive Shop	2
ASE 110	Automotive Brake Service I	2
ASE 111	Automotive Brake Service II	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Starting & Charging System	2
ASE 210	Automotive Power & ABS Brake Systems	2
Total Credit Hours		12

Automotive Electricity

The Automotive Electricity Certificate is designed for students to learn the basics of shop safety and common shop equipment. Students learn about vehicle electricity and wiring diagrams, as well as starting and charging systems. Students also learn about the theory, operation, diagnosis, and repair of vehicle accessories. The major emphasis is on the skills associated with the inspection and testing of typical computerized engine control systems, including ignition systems.

Program Learning Outcomes

Upon completion of the Automotive Electricity certificate program, students should be able to:

- Test, service, and repair vehicle starting and charging systems
- Inspect and test computerized engine controls and ignition systems
- Diagnose, service, and repair automotive and diesel body electrical systems (e.g., starting and charging systems, lighting systems)

ASE 102	Introduction to the Automotive Shop	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Starting & Charging System	2
ASE 221	Automotive & Diesel Body Electrical	4
ASE 231	Automotive Computers & Ignition Systems	2
Total Credit Hours		12

Automotive Parts

The Automotive Parts Certificate is designed for students to learn the basics of shop safety and common shop equipment. Students learn about vehicle electricity and wiring diagrams, as well as starting and charging systems. Students learn about a variety of automotive components (brakes, suspension, steering, transmissions, automotive computers, etc.), as well as the proper methods for completing parts invoices, repair orders, sales receipts, and tickets. In addition, students learn about handling and pricing procedures used in parts areas, warehouse distributors, and retail and wholesale prices.

Program Learning Outcomes

Upon completion of the Automotive Parts certificate program, students should be able to:

- Diagnose and repair electronic fuel injection systems and modern exhaust systems
- Diagnose and repair engines (e.g., block and head assemblies, cylinder head)
- Diagnose and repair manual transmissions, transaxles, and clutches
- Diagnose, service, and repair anti-lock braking systems, power assist units, and traction control systems

- Diagnose, service, and repair automotive and diesel body electrical systems (e.g., starting and charging systems, lighting systems, ignition systems)
- Diagnose, service, and repair suspension and steering systems and wheel alignment issues
- Diagnose and service vehicle heating and air conditioning systems and their components
- Complete forms commonly used in a parts business (e.g., parts invoices, repair orders, sales receipts)

ASE 102	Introduction to the Automotive Shop	2
ASE 110	Automotive Brake Service I	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Starting & Charging System	2
ASE 132	Ignition System Diagnosis & Repair	2
ASE 134	Automotive Fuel & Emissions Systems I	2
ASE 140	Suspension & Steering I	2
ASE 150	Manual Drive Train & Axle Maintenance	2
ASE 151	Automotive Manual Transmission/Transaxles & Clutches I	2
ASE 152	Manual Transmission, Transaxles & Clutches II	2
ASE 160	Automotive Engine Repair	2
ASE 161	Automotive Engine Repair & Rebuild	3
ASE 201	Automotive Parts Management	1
ASE 210	Automotive Power & ABS Brake Systems	2
ASE 221	Automotive & Diesel Body Electrical	4
ASE 231	Automotive Computers & Ignition Systems	2
ASE 233	Auto Fuel Injection & Emissions Systems II	4
ASE 240	Suspension & Steering III	2
ASE 265	Heating & Air Conditioning Systems	4
Total Credit Hours		44

Automotive Technology

The Automotive Technology Certificate is designed for students to learn the basics of shop safety and common shop equipment. Students learn about vehicle electricity and wiring diagrams, as well as starting and charging systems. Students learn about a variety of automotive components (brakes, suspension, steering, transmissions, automotive computers, etc.), as well as skills associated with the diagnosis and repair of heating and air conditioning systems, fuel injection and emission systems, engine repair and rebuild, alignment types and procedures, and automotive and diesel body electrical systems.

Program Learning Outcomes

Upon completion of the Automotive Technology certificate program, students should be able to:

- Diagnose and repair electronic fuel injection systems and modern exhaust systems
- Diagnose and repair engines (e.g., block and head assemblies, cylinder head)
- Diagnose and repair manual transmissions, transaxles, and clutches
- Diagnose, service, and repair anti-lock braking systems, power assist units, and traction control systems
- Diagnose, service, and repair automotive and diesel body electrical systems (e.g., starting and charging systems, lighting systems, ignition systems)
- Diagnose, service, and repair suspension and steering systems and wheel alignment issues
- Diagnose and service vehicle heating and air conditioning systems and their components

ASE 102	Introduction to the Automotive Shop	2
ASE 110	Automotive Brake Service I	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Starting & Charging System	2
ASE 132	Ignition System Diagnosis & Repair	2

ASE 134	Automotive Fuel & Emissions Systems I	2
ASE 140	Suspension & Steering I	2
ASE 150	Manual Drive Train & Axle Maintenance	2
ASE 151	Automotive Manual Transmission/Transaxles & Clutches I	2
ASE 152	Manual Transmission, Transaxles & Clutches II	2
ASE 160	Automotive Engine Repair	2
ASE 161	Automotive Engine Repair & Rebuild	3
ASE 210	Automotive Power & ABS Brake Systems	2
ASE 221	Automotive & Diesel Body Electrical	4
ASE 231	Automotive Computers & Ignition Systems	2
ASE 233	Auto Fuel Injection & Emissions Systems II	4
ASE 240	Suspension & Steering III	2
ASE 265	Heating & Air Conditioning Systems	4
Total Credit Hours		43

Engine Performance

The Engine Performance Certificate is designed for students to learn the basics of shop safety and common shop equipment. Students learn about vehicle electricity and wiring diagrams, as well as starting and charging systems. In addition, students learn the skills to diagnose and troubleshoot automotive system repairs, including starting and charging systems, ignition, fuel, and emissions systems, as well as engine rebuilding and repairing, for automotive and diesel systems. Students will learn gain experience in diagnostic techniques and diagnostic scan tools, oscilloscopes, lab scopes, multi-meters, and gas analyzers.

Program Learning Outcomes

Upon completion of the Engine Performance certificate program, students should be able to:

- Diagnose, service, and repair automotive and diesel body electrical systems (e.g., starting and charging systems, lighting systems, ignition systems)
- Diagnose and repair engines (e.g., block and head assemblies, cylinder head)
- Diagnose and repair electronic fuel injection systems and modern exhaust systems
- Diagnose and repair computerized engine controls and ignition systems

ASE 102	Introduction to the Automotive Shop	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Starting & Charging System	2
ASE 130	General Engine Diagnosis	2
ASE 132	Ignition System Diagnosis & Repair	2
ASE 134	Automotive Fuel & Emissions Systems I	2
ASE 160	Automotive Engine Repair	2
ASE 161	Automotive Engine Repair & Rebuild	3
ASE 221	Automotive & Diesel Body Electrical	4
ASE 231	Automotive Computers & Ignition Systems	2
ASE 233	Auto Fuel Injection & Emissions Systems II	4
ASE 235	Driveability & Diagnosis	2
Total Credit Hours		29

Gasoline Engine Repair

The Gasoline Engine Repair Certificate is designed for students to learn the basics of shop safety and common shop equipment. Students learn about vehicle electricity and wiring diagrams, as well as starting and charging systems. The major emphasis is on the service of cylinder head, valve-train components, and components of the cooling system. Students learn about engine removal and reinstallation and re-mounting systems, as well as disassembly, diagnosis, and reassembly of the automotive engine.

Program Learning Outcomes

Upon completion of the Gasoline Engine Repair certificate program, students should be able to:

- Diagnose and repair engines (e.g., block and head assemblies, cylinder head)
- Test, service, and repair vehicle starting and charging systems

ASE 102	Introduction to the Automotive Shop	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Starting & Charging System	2
ASE 160	Automotive Engine Repair	2
ASE 161	Automotive Engine Repair & Rebuild	3

Total Credit Hours **11**

Manual Drivetrain

The Manual Drivetrain Certificate is designed for students to learn the basics of shop safety and common shop equipment. Students learn about vehicle electricity and wiring diagrams, as well as starting and charging systems. The major emphasis is on the operating principles and repair procedures relating to axle-shaft and universal joints. Students gain skills in the diagnosis and repair of automotive manual transmissions, transaxles and clutches and related components. In addition, students learn to diagnose and repair automotive differentials, four wheel, and all-wheel drive units.

Program Learning Outcomes

Upon completion of the Manual Drivetrain certificate program, students should be able to:

- Test, service, and repair vehicle starting and charging systems
- Diagnose and repair manual transmissions, transaxles, and clutches

ASE 102	Introduction to the Automotive Shop	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Starting & Charging System	2
ASE 150	Manual Drive Train & Axle Maintenance	2
ASE 151	Automotive Manual Transmission/Transaxles & Clutches I	2
ASE 152	Manual Transmission, Transaxles & Clutches II	2

Total Credit Hours **12**

Suspension and Steering

The Suspension and Steering Certificate is designed for students to learn the basics of shop safety and common shop equipment. Students learn about vehicle electricity and wiring diagrams, as well as starting and charging systems. The major emphasis is on the diagnosis, inspection, and service of suspension and steering systems used in light trucks and automobiles. Students learn about the operation of steering and power steering systems and includes different alignment types and procedures.

Program Learning Outcomes

Upon completion of the Suspension & Steering certificate program, students should be able to:

- Test, service, and repair vehicle starting and charging systems
- Diagnose, service, and repair suspension and steering systems and wheel alignment issues

ASE 102	Introduction to the Automotive Shop	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Starting & Charging System	2
ASE 140	Suspension & Steering I	2
ASE 240	Suspension & Steering III	2

Total Credit Hours **10**

Additional information available on the Automotive Technology Department website at www.pccc.edu/degrees-certificates/automotive-technology.

Building and Construction Technology

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

A program that prepares individuals to apply technical knowledge and skills to residential and commercial building construction and remodeling. Includes instruction in construction equipment and safety; site preparation and layout; construction estimating; blueprint reading; building codes; framing; masonry; heating, ventilation and AC; electrical and mechanical systems; interior and exterior finishing; and plumbing.

All students should schedule appointments with Building and Construction Technology program advisors before enrolling in class.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

Program Learning Outcomes

Upon completion of the Building and Construction Technology degree program, students should be able to:

- Interpret construction documents using industry standards in the building and construction field
- Research, interpret, and apply appropriate building and structural codes in building and construction
- Estimate the materials and labor for a construction project
- Perform hands-on activities integrating other industries for supplementation of skills for residential construction and light commercial construction

General Education Courses

CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
COM 115	Public Speaking	3
or		
COM 225	Organizational Communication	(3)
ENG 121	English Composition I: CO1	3
or		
ENG 131	Technical Writing I: CO1	(3)
MAT 107	Career Math	3
or		
MAT	AAS General Education Math course	(3-4)
	Choose three (3) hours from list below	3
		15-16

Choose three (3) credit hours

PSY 100	Psychology of Workplace Relationships	3
PSY 101	General Psychology I: SS3	3
SPA 101	Conversational Spanish I	3

Additional Required Courses (for all Emphasis Areas)

AEC 107	Print Reading Residential/Commercial	3
CAD 104	CAD for Architecture	4
CON 142	International Residential Code (IRC)	4
CON 157	National Center for Construction Education & Research Core	5
		18

Emphasis Areas

Carpentry

AEC 216	Construction Estimating	3
AEC 226	Construction Scheduling	3
AEC 236	International Building Codes	3
CON 158	National Center for Construction Education & Research Carpentry I	6
CON 159	National Center for Construction Education & Research Carpentry II	6
CON 160	National Center for Construction Education & Research Carpentry III	6
CON 161	National Center for Construction Education & Research Carpentry IV	6
CON 207	Light Construction Equipment	3
CON 280	Internship	2
or		
CON 289	Capstone	(1)
		37

Total Credit Hours for Carpentry Degree Emphasis **70**

Electrical

CON 162	National Center for Construction Education & Research Electrical I	6
CON 163	National Center for Construction Education & Research Electrical II	6
CON 164	National Center for Construction Education & Research Electrical III	6
CON 165	National Center for Construction Education & Research Electrical IV	6
CON 280	Internship	2
or		
CON 289	Capstone	(1)
EIC 130	National Electrical Code I	4
EIC 135	National Electrical Code II	4
EIC 217	Electrical Estimating/Costing	3
		37

Total Credit Hours for Electrical Degree Emphasis **70**

Masonry

AEC 216	Construction Estimating	3
AEC 226	Construction Scheduling	3
AEC 236	International Building Codes	3
ARE 113	Masonry I	4
ARE 123	Masonry II	4
ARE 133	Masonry II	4
ARE 143	Masonry IV	4
ARE 153	Masonry V	4
ARE 163	Masonry VI	4
CON 207	Light Construction Equipment	3
CON 280	Internship	2
or		
CON 289	Capstone	(1)
		38

Total Credit Hours for Masonry Degree Emphasis **71-72**

Plumbing

CON 166	National Center for Construction Education & Research Plumbing I	6
CON 167	National Center for Construction Education & Research Plumbing II	6
CON 168	National Center for Construction Education & Research Plumbing III	6
CON 169	National Center for Construction Education & Research Plumbing IV	6
CON 280	Internship	2
or		
CON 289	Capstone	(1)
PLU 207	International Plumbing Code	4
PLU 208	International Fuel Gas Code	4
PLU 250	Plumbing Estimating & Costing	4
		37

Total Credit Hours for Plumbing Degree Emphasis **70**

Certificates

Carpentry Advanced Applications

This Carpentry Advanced Applications Certificate introduces the NCCER Carpentry level three and level four for the advanced skills in the construction trades. Topics include commercial properties of concrete, rigging equipment, rigging practices, trenching and excavating, reinforcing concrete, foundations and slabs-on-grade, vertical formwork, horizontal formwork, handling and placing concrete, and tilt-up wall systems. Additional focus on site layout differential leveling, site layout angular and distance measurement, advanced roof systems, advanced wall systems, advanced stair systems, introduction to construction equipment, introduction to oxyfuel cutting and arc welding, site preparation, and fundamentals of crew leadership.

Program Learning Outcomes

Upon completion of the Carpentry Advanced Applications certificate program, students should be able to:

- Interpret construction documents using industry standards in the advanced carpentry trades (e.g., light commercial, rigging)
- Research, interpret, and apply appropriate building and structural codes in advanced carpentry
- Discuss the restrictions, standards, and requirements governing the construction industry
- Estimate the materials and labor for an advanced carpentry project
- Create construction schedules using the critical path method
- Explain advanced construction techniques required for certification in NCCER Carpentry Level III (e.g., handling concrete, trenching, erecting tilt-up walls) and Level IV (e.g., site preparation, construction equipment, advanced systems such as walls, roofs, and stairs)

AEC 107	Print Reading Residential/Commercial	3
AEC 226	Construction Scheduling	3
AEC 236	International Building Codes	3
CON 160	National Center for Construction Education & Research Carpentry III	6
CON 161	National Center for Construction Education & Research Carpentry IV	6
		21

Total Credit Hours **21**

Carpentry Fundamentals

This Carpentry Fundamentals Certificate introduces NCCER Carpentry level one and level two foundational carpentry skills, basic residential construction systems, the importance of personal and workplace safety, and the role of carpenters within the construction industry. Additional focus on commercial drawings, cold-formed steel framing, exterior finishing, thermal and moisture protection, roofing applications, doors and door hardware, drywall installation, drywall finishing, suspended ceilings, window, door, floor, and ceiling trim, and cabinet installation.

Program Learning Outcomes

Upon completion of the Carpentry Fundamentals certificate program, students should be able to:

- Interpret construction documents using industry standards in the carpentry trades
- Research, interpret, and apply appropriate building and structural codes in carpentry applications
- Discuss requirements associated with the major systems of residential building construction (i.e., mechanical, plumbing, and electrical)
- Explain the fundamentals of the carpentry trades (e.g., construction site safety, hand and power tools, measurements, materials, and applications)
- Estimate the materials and labor for a residential carpentry project
- Explain and perform construction techniques required for certification in NCCER Carpentry Level I (e.g., erecting roofs, installing doors and windows) and Level II (e.g., insulation, drywall application, cabinets installation and trim carpentry)

CON 142	International Residential Code (IRC)	4
CON 157	National Center for Construction Education & Research Core	5
CON 158	National Center for Construction Education & Research Carpentry I	6
CON 159	National Center for Construction Education & Research Carpentry II	6
Total Credit Hours		21

Carpentry I

This Carpentry I Certificate prepares individuals for employment or advancement in the carpentry trade of the building and construction industry. A combination of academic and practical instruction will provide students with knowledge and skills that are necessary for success in this profession, including those related to basic safety concerns and procedures. Students gain hands-on experience in the use of hand and power tools, construction work, and blue-print reading. Credits may also be applied to the building trades technology AAS degree.

CAR 101	Basic Safety	1
CAR 102	Hand & Power Tools	1
CAR 103	Carpentry Basics	4
CAR 105	Job Site Layout & Blueprint Reading	1
Total Credit Hours		7

Carpentry II

This Carpentry II Certificate provides skills for students entering the Building and Construction Industry. Students will have developed entry level skills that will prepare them with a combination of academic and practical instruction on the knowledge and skills that are necessary for success in this profession, including those related to basic safety concerns and procedures. Students gain hands-on experience in floor and wall construction (interior and exterior), form and foundation systems,

roof framing, and the selection and installation of various types of insulating materials for thermal and moisture barriers.

CAR 104	Floor & Wall Construction	4
CAR 115	Form & Foundation Systems	1
CAR 123	Roof Framing	1
CAR 125	Roofing Materials & Methods	1
CAR 135	Thermal & Moisture Methods & Materials	1
Total Credit Hours		8

Electrical Advanced Applications

This Electrical Advanced Applications Certificate introduces the NCCER Carpentry level three and level four advanced skills for the electrical trades to include load calculations for branch and feeder circuits, conductor selection and calculations for installation, practical applications of lighting, hazardous locations, overcurrent protection, distribution equipment, transformers, commercial electrical services, motor calculations, voice, data, and video systems, and motor controls. Additional focus on applications specific to health care facilities, standby and emergency systems, basic electronic theory, considerations for fire alarm systems, installing specialty transformers, advanced controls, Heating, Ventilation, and Air Conditioning (HVAC) controls, heat tracing and freeze protection, motor operation and maintenance, medium-voltage terminations/splices, and applications for special locations.

Program Learning Outcomes

Upon completion of the Electrical Advanced Applications certificate program, students should be able to:

- Interpret advanced construction documents using industry standards in the electrical trade with special considerations to fire alarm systems and special facilities (e.g., schools and healthcare facilities)
- Research, interpret, and apply appropriate building and structural codes in advanced electrical applications (e.g., standby and emergency systems)
- Discuss the restrictions, standards, and requirements governing the electrical industry
- Formulate a construction safety and loss prevention program
- Estimate the materials and labor for an advanced electrical installation project
- Explain advanced electrical techniques required for certification in NCCER Electrical Level III (e.g., overcurrent protection, transformer installation) and Level IV (e.g., advanced controls, motor operation and maintenance)

AEC 233	Construction Safety & Loss Prevention	2
CON 164	National Center for Construction Education & Research Electrical III	6
CON 165	National Center for Construction Education & Research Electrical IV	6
EIC 135	National Electrical Code II	4
EIC 217	Electrical Estimating/Costing	3
Total Credit Hours		21

Electrical Fundamentals

This Electrical Fundamentals certificate introduces the NCCER Electrical level one and level two fundamentals of electrical trades and practices in residential application. Topics include orientation to the electrical trade, electrical safety, basic electrical circuits, electrical theory, introduction to the National Electrical Code (NEC), device boxes, raceways and fittings, conductors and cables, basic electrical construction drawings, residential electrical services, electrical test equipment, and basic installation techniques. Additional focus on alternating current, theory and application, electric lighting, conduit bending, pull and junction

boxes, conductor installations, cable tray, conductor terminations and splices, grounding and bonding, circuit breakers and fuses, and control systems and fundamental concepts.

Program Learning Outcomes

Upon completion of the Electrical Fundamentals certificate program, students should be able to:

- Interpret construction documents using industry standards in the electrical trades
- Research, interpret, and apply appropriate building and structural codes in electrical applications
- Explain the fundamentals of the electrical trade (e.g., electrical theory and basic electricity, site safety, tools of the trade, measurements, materials, application, and installation)
- Estimate the materials and labor for a residential electrical installation project
- Explain and perform electrical skill techniques required for certification in NCCER Electrical Level I (e.g., safety procedures, electrical tests) and Level II (e.g., conductor installation, grounding and bonding, circuit breakers and fuses)

CON 157	National Center for Construction Education & Research Core	5
CON 162	National Center for Construction Education & Research Electrical I	6
CON 163	National Center for Construction Education & Research Electrical II	6
EIC 130	National Electrical Code I	4
Total Credit Hours		21

Masonry Advanced Applications

This Masonry Advanced Applications Certificate introduces the NCCER Carpentry level three advanced skills for the masonry trades to include elevated masonry, specialized materials and techniques, repair and restoration, commercial drawings, estimating, site layout, distance measurement and leveling, and stone masonry. Additional focus to include estimating and scheduling installation types.

Program Learning Outcomes

Upon completion of the Masonry Advanced Applications certificate program, students should be able to:

- Interpret construction documents using industry standards in the advanced masonry trades (e.g., elevated masonry, repair and restoration light commercial)
- Research, interpret, and apply appropriate building and structural codes in advanced masonry
- Discuss the restrictions, standards, and requirements governing the masonry industry
- Estimate the materials and labor for an advanced masonry project
- Create construction schedules for masonry projects
- Explain and perform advanced masonry techniques required for certification in NCCER Masonry Level III (e.g., decorative and structural columns, corners, archways, lintels)

AEC 107	Print Reading Residential/Commercial	3
AEC 216	Construction Estimating	3
AEC 226	Construction Scheduling	3
ARE 143	Masonry IV	4
ARE 153	Masonry V	4
ARE 163	Masonry VI	4
Total Credit Hours		21

Masonry Fundamentals

This Masonry Fundamentals Certificate introduces the NCCER Plumbing level one and level two fundamentals of masonry trades and practices in residential application to include the fundamentals of basic masonry materials, equipment and tools, mathematical concepts used to calculate masonry units, specifications, codes, mortar, installation techniques, safety, and the career of masonry. Additional focus on residential plans and drawing interpretation, residential masonry, reinforced masonry, masonry openings and metal work, advanced laying techniques, effects of climate on masonry, and construction inspection and quality control.

Program Learning Outcomes

Upon completion of the Masonry Fundamentals certificate program, students should be able to:

- Interpret construction documents using industry standards in the masonry trades
- Research, interpret, and apply appropriate building and structural codes in masonry applications
- Explain the fundamentals of the masonry trade (e.g., materials and equipment, site safety, hand and power tools of the trade, measurement and calculations, effects of climate on masonry, various applications and installation)
- Estimate the materials and labor for a residential masonry project
- Explain and perform masonry installation techniques required for certification in NCCER Masonry Level I (e.g., safety procedures, proper mortar, laying techniques, control joints cutting of material) and Level II (e.g., masonry openings and metal work)

ARE 113	Masonry I	4
ARE 123	Masonry II	4
ARE 133	Masonry II	4
CON 142	International Residential Code (IRC)	4
CON 157	National Center for Construction Education & Research Core	5
Total Credit Hours		21

Plumbing Advanced Applications

This Plumbing Advanced Applications Certificate introduces the NCCER Plumbing level three and level four advanced skills for the plumbing trades to include applied math, sizing and protecting the water supply system, potable water Supply treatment, types of venting, sizing Drain, Waste, and Vent (DWV) and storm systems, sewage sumps and sump pump, corrosive-resistant waste piping, compressed air, and service plumbing. Additional focus on business principles for plumbers, introductory skills for the crew leader, water pressure booster and recirculation systems, indirect and special waste, and hydronic and solar heating systems and practices for plumbing.

Program Learning Outcomes

Upon completion of the Plumbing Advanced Applications certificate program, students should be able to:

- Interpret construction documents using industry standards in the advanced plumbing trades (e.g., sizing and protecting the water supply system, potable water Supply treatment, hydronic and solar heating systems)
- Research, interpret, and apply appropriate building and structural codes in advanced plumbing
- Discuss the restrictions, standards, and requirements governing the plumbing industry
- Apply the international fuel gas code requirements to plumbing systems

- Estimate the materials and labor for an advanced plumbing project
- Formulate a construction safety and loss prevention program
- Explain advanced plumbing techniques required for certification in NCCER Plumbing Level III (e.g., repairing water supply systems, installing water-conditioning equipment) and Level IV (e.g., hydronic and solar heating systems, installing swimming pool systems)

AEC 233	Construction Safety & Loss Prevention	2
CON 168	National Center for Construction Education & Research Plumbing III	6
CON 169	National Center for Construction Education & Research Plumbing IV	6
PLU 208	International Fuel Gas Code	4
PLU 250	Plumbing Estimating & Costing	4
Total Credit Hours		22

Plumbing Fundamentals

This Plumbing Fundamentals Certificate introduces the NCCER Plumbing level one and level two fundamentals of plumbing trades and practices in residential application to include common types of piping, their proper fitting, fixtures, distribution systems, construction drawings; plastic, copper, cast-iron, and carbon steel piping; fixtures and faucets; introduction to Drainage, Waste, and Vent (DWV) systems; and water distribution systems. Additional focus on offsets around obstructions, reading commercial drawings, installing and testing Drainage, Waste, and Vent (DWV) piping systems, installing roof, floor and area drains, servicing various types of valves, installation of fixtures, faucets, hot water systems and a discussion on fuel systems.

Program Learning Outcomes

Upon completion of the Plumbing Fundamentals certificate program, students should be able to:

- Interpret construction documents using industry standards in the plumbing trades
- Research, interpret, and apply appropriate building and structural codes in plumbing applications
- Explain the fundamentals of the plumbing trades (e.g., site safety, hand and power tools, measurements drawings, materials, drainage, and water distribution systems)
- Estimate the materials and labor for a residential plumbing project
- Explain and perform plumbing skill techniques required for certification in NCCER Plumbing Level I (e.g., piping, drainage, fixture installation) and Level II (e.g., installing hot water systems, servicing valves)

CON 157	National Center for Construction Education & Research Core	5
CON 166	National Center for Construction Education & Research Plumbing I	6
CON 167	National Center for Construction Education & Research Plumbing II	6
PLU 207	International Plumbing Code	4
Total Credit Hours		21

Additional information available on the Building and Construction Technology Department website at www.pccc.edu/construction.

Business Administration

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Students may select from various programs to meet their specific career goals. Certificate programs can be completed in one year or less in the areas of Administrative Assistant, Business Foundations, Management and Social Innovation.

Two-year Associate of Applied Science degrees are available in several emphasis areas as detailed in the following section of this catalog. Transfer degrees intended to prepare the student for transfer to four-year institutions are also offered. Business students interested in transferring to a four-year university should refer to the Associate of Arts Degree in Business.

Faculty advisors are available to assist students in evaluating the various options. Call 719-502-3300 at the Centennial Campus or 719-502-3215 at the Rampart Range Campus for program information or to schedule a personal appointment with a business program faculty advisor.

This degree program is designed for students who wish to pursue a career in business with a specific area of emphasis.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

Program Learning Outcomes

Upon completion of Business Administration degree program, students should be able to:

- Analyze contemporary business concepts
- Apply comprehension of business terminology in deliverables
- Compare different economic philosophies
- Perform library research, analytical, and business writing/oral communication skills

General Education Requirements

CIS 118	Introduction to PC Applications	3
COM 115	Public Speaking	3
ECO 201	Principles of Macroeconomics: SS1	3
	or	
ECO 202	Principles of Microeconomics: SS1	(3)
ENG 121	English Composition I: CO1	3
MAT 112	Financial Mathematics	3
		15

Business Foundation course requirements for all emphasis areas

ACC 101	Fundamentals of Accounting	3
	or	
ACC 121	Accounting Principles I	(4)
BUS 115	Introduction to Business	3
FIN 106	Consumer Economics	3
MAN 128	Human Relations in Organizations	3
MAR 160	Customer Service	3
		15-16

NOTE: Completion of the 30-31 hours in General Education and Business Foundation courses earns the student a Business Foundations Certificate.

Emphasis Areas

Administrative Support

The Administrative Support Emphasis is designed to prepare students to become office professionals in positions that require skills in computer technology, communication skills, customer service, and office applications.

BTE 102	Keyboarding Applications I	2
BTE 108	Ten-Key by Touch	1
BTE 111	Keyboarding Speedbuilding I	2
BTE 166	Business Editing Skills	3
BUS 217	Business Communication & Report Writing	3
CIS 135	Complete Word Processing	3
CIS 140	Microsoft Outlook	1
CIS 155	Complete Spreadsheets: (Software package)	3
CIS 165	Complete Presentation Graphics	3
MAN 246	Critical Issues in Marketing & Management	3
Electives	Choose six (6) hours from list below	6
		<u>30</u>

Total Credit Hours for Administrative Support Emphasis 60-61

Administrative Support Emphasis Electives

ACC 115	Payroll Accounting	3
ACC 125	Computerized Accounting	3
BTE 187	Cooperative Education/Internship	3
CIS 124	Introduction to Operating Systems	3
CIS 145	Introduction to Desktop Database	3
CWB 110	Introduction to Web Authoring	3
MAN 116	Principles of Supervision	3
MAN 200	Human Resource Management I	3

Management

The Management Emphasis is designed for those students whose career path or occupational goal includes working in a corporate organizational structure as a manager of a particular department or functional area.

BUS 181	Internship	3
	or	
MAN 116	Principles of Supervision	(3)
BUS 216	Legal Environment of Business	3
BUS 217	Business Communication & Report Writing	3
BUS 226	Business Statistics	3
FIN 201	Principles of Finance	3
MAN 200	Human Resource Management I	3
MAN 226	Principles of Management	3
MAN 240	Strategic Management	3
MAN 246	Critical Issues in Marketing & Management	3
MAR 216	Principles of Marketing	3
		<u>30</u>

Total Credit Hours for Management Emphasis 60-61

Social Innovation

The Social Innovation Emphasis is designed to prepare students to become socially involved business professionals who will bring business operations, marketing, and management skills into a not-for-profit business and socially responsible impact skills into a for-profit business.

BUS 216	Legal Environment of Business	3
BUS 226	Business Statistics	3
BUS 289	Capstone	3
MAN 240	Strategic Management	3
MAR 216	Principles of Marketing	3

PHI 205	Business Ethics: AH3	3
SOC 218	Sociology of Diversity: SS3	3
Electives	Choose nine (9) hours from list below	9
		<u>30</u>

Total Credit Hours for Social Innovation Emphasis 60-61

Social Innovation Emphasis Electives

AEC 218	Sustainable Building Systems	3
ANT 101	Cultural Anthropology: SS3	3
ANT 225	Anthropology of Religion: SS3	3
ANT 250	Medical Anthropology: SS3	3
ANT 260	Sex, Gender, & Culture	3
AST 155	Astronomy Ancient Cultures: SC2	3
CAR 103	Carpentry Basics	4
COM 125	Interpersonal Communication	3
COM 220	Intercultural Communication: SS3	3
ECE 205	Nutrition, Health & Safety	3
EMP 101	Principles of Emergency Management	3
ENP 105	Introduction to Entrepreneurship	3
ENV 101	Introduction to Environmental Science: SC1	3
ETH 224	Introduction to Chicano Studies	3
WOL	World Language	3
GEO 106	Human Geography: SS2	3
GEY 135	Environmental Geology w/Lab: SC1	4
HIS 205	Women in World History: HI1	3
HIS 208	American Indian History: HI1	3
HIS 215	Women in U.S. History: HI1	3
HIS 243	History of Modern China: HI1	3
HIS 249	History of Islamic Civilization: HI1	3
HIS 250	African American History: HI1	3
HWE 100	Human Nutrition	3
JOU 225	New Media	3
JOU 231	Introduction to Public Relations	4
MAN 216	Small Business Management	3
OUT 134	Wilderness Ethics	2
OUT 167	Basic Search & Rescue	3
PHI 112	Ethics: AH3	3
PHI 114	Comparative Religions: AS3	3
PHI 115	World Religions-West: AH3	3
PHI 116	World Religions-East: AH3	3
PHI 218	Environmental Ethics: AH3	3
POS 205	International Relations: SS1	3
PSY 100	Psychology of Workplace Relations	3
PSY 205	Psychology of Gender: SS3	3
PSY 217	Human Sexuality: SS3	3
PSY 226	Social Psychology: SS3	3
PSY 227	The Psychology of Death & Dying: SS3	3
PSY 238	Child Development: SS3	3
PSY 247	Child Abuse & Neglect	3
SWK 100	Introduction to Social Work	3
WST 200	Introduction to Women`s Studies: SS3	3

Certificates

Administrative Assistant

This certificate program is designed to prepare students to become office professionals in positions that require skills in computer technology, communication skills, customer service, and office applications.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

Program Learning Outcomes

Upon completion of the Administrative Assistant certificate program, students should be able to:

- Use computer technology, office applications, and the ten-key pad
- Communicate business ideas and information in a variety of formats
- Employ skills and techniques that create positive customer experiences

BTE 102	Keyboarding Applications I	2
BTE 108	Ten-Key by Touch	1
BTE 111	Keyboarding Speedbuilding I	2
BTE 166	Business Editing Skills	3
BUS 115	Introduction to Business	3
BUS 217	Business Communication & Report Writing	3
CIS 135	Complete Word Processing	3
CIS 140	Microsoft Outlook	1
CIS 155	Complete Spreadsheets: (Software package)	3
CIS 165	Complete Presentation Graphics	3
MAR 160	Customer Service	3
Electives	Choose three (3) hours from list below	3
Total Credit Hours		30

Administrative Assistant Electives

ACC 101	Fundamentals of Accounting	3
ACC 115	Payroll Accounting	3
ACC 121	Accounting Principles I	4
ACC 125	Computerized Accounting	3
BTE 187	Cooperative Education/Internship	3
CIS 124	Introduction to Operating Systems	3
CIS 145	Introduction to Desktop Database	3
CWB 110	Introduction to Web Authoring	3
MAN 116	Principles of Supervision	3
MAN 200	Human Resource Management I	3
MAN 246	Critical Issues in Marketing & Management	3

Business Foundations

This certificate will allow students exposure to most of the major areas of business. Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

Program Learning Outcomes

Upon completion of the Business Foundations certificate program, students should be able to:

- Apply the principles of accounting and financial mathematics in a business organization
- Apply fundamental business principles to real-world scenarios
- Communicate effectively with clients and co-workers
- Distinguish between principles of macroeconomics and microeconomics
- Employ skills and techniques that create positive customer experiences
- Use a variety of computer technology and office applications

ACC 101	Fundamentals of Accounting	3
or		
ACC 121	Accounting Principles I	(4)
BUS 115	Introduction to Business	3
CIS 118	Introduction to PC Applications	3
COM 115	Public Speaking	3
ECO 201	Principles of Macroeconomics: SS1	3
or		
ECO 202	Principles of Macroeconomics: SS1	(3)

ENG 121	English Composition I: CO1	3
FIN 106	Consumer Economics	3
MAN 128	Human Relations in Organizations	3
MAR 160	Customer Service	3
MAT 112	Financial Mathematics	3
Total Credit Hours		30-31

Management

The Management certificate program is designed for those students whose career path or occupational goal includes working in a corporate organizational structure as a manager of a particular department or functional area.

Program Learning Outcomes

Upon completion of the Management certificate program, students should be able to:

- Communicate business ideas and information in a variety of formats
- Integrate the four basic functions of management to develop business strategies
- Analyze legal, ethical, and regulatory issues impacting business operations
- Apply basic principles of statistics to support business decisions
- Apply principles of marketing for businesses and consumers

BUS 181	Internship	3
or		
MAN 116	Principles of Supervision	(3)
BUS 216	Legal Environment of Business	3
BUS 217	Business Communication & Report Writing	3
BUS 226	Business Statistics	3
FIN 201	Principles of Finance	3
MAN 200	Human Resource Management I	3
MAN 226	Principles of Management	3
MAN 240	Strategic Management	3
MAN 246	Critical Issues in Marketing & Management	3
MAR 216	Principles of Marketing	3
Total Credit Hours		30

Social Innovation

The Social Innovation Certificate is designed to prepare students to become socially involved business professionals who will bring business operations, marketing, and management skills into a not-for-profit business and socially responsible impact skills into a for-profit business.

Program Learning Outcomes

Upon completion of the Social Innovation certificate program, students should be able to:

- Interpret laws and regulations associated with business
- Employ business statistics
- Apply strategic management to achieve competitive advantage
- Apply principles of marketing for businesses and consumers
- Use ethical decision making in a business environment

BUS 216	Legal Environment of Business	3
BUS 226	Business Statistics	3
BUS 289	Capstone	3
MAN 240	Strategic Management	3
MAR 216	Principles of Marketing	3
PHI 205	Business Ethics: AH3	3
SOC 218	Sociology of Diversity: SS3	3
Electives	Choose nine (9) hours from list below	9
Total Credit Hours		30

Electives

AEC 218	Sustainable Building Systems	3
ANT 101	Cultural Anthropology: SS3	3
ANT 225	Anthropology of Religion: SS3	3
ANT 250	Medical Anthropology: SS3	3
ANT 260	Sex, Gender, & Culture	3
AST 155	Astronomy Ancient Cultures: SC2	3
CAR 103	Carpentry Basics	4
COM 125	Interpersonal Communication	3
COM 220	Intercultural Communication: SS3	3
ECE 205	Nutrition, Health & Safety	3
EMP 101	Principles of Emergency Management	3
ENP 105	Introduction to Entrepreneurship	3
ENV 101	Introduction to Environmental Science: SC1	3
ETH 224	Introduction to Chicano Studies	3
WOL	World Language	3
GEO 106	Human Geography: SS2	3
GEY 135	Environmental Geology w/Lab: SC1	4
HIS 205	Women in World History: HI1	3
HIS 208	American Indian History: HI1	3
HIS 215	Women in U.S. History: HI1	3
HIS 243	History of Modern China: HI1	3
HIS 249	History of Islamic Civilization: HI1	3
HIS 250	African American History: HI1	3
HWE 100	Human Nutrition	3
JOU 225	New Media	3
JOU 231	Introduction to Public Relations	4
MAN 216	Small Business Management	3
OUT 134	Wilderness Ethics	2
OUT 167	Basic Search & Rescue	3
PHI 112	Ethics: AH3	3
PHI 114	Comparative Religions: AS3	3
PHI 115	World Religions-West: AH3	3
PHI 116	World Religions-East: AH3	3
PHI 218	Environmental Ethics: AH3	3
POS 205	International Relations: SS1	3
PSY 100	Psychology of Workplace Relations	3
PSY 205	Psychology of Gender: SS3	3
PSY 217	Human Sexuality: SS3	3
PSY 226	Social Psychology: SS3	3
PSY 227	The Psychology of Death & Dying: SS3	3
PSY 238	Child Development: SS3	3
PSY 247	Child Abuse & Neglect	3
SWK 100	Introduction to Social Work	3
WST 200	Introduction to Women's Studies: SS3	3

Additional information available on the Business Department website at www.pccc.edu/bus.

Computer Aided Drafting and Design - Mechanical

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

The Computer Aided Drafting (CAD) program prepares students to enter the workforce as a skilled CAD technician for who are equipped with a solid foundation for drafting positions in manufacturing, engineering, and other areas requiring production-ready drawings and 3-dimensional or 3D printed models. Students will learn to prepare 2D and 3D projects for fabrication using the latest releases of multiple CAD software. In addition, students will acquire skills in subject matter of design principles, industry standards, fabrication materials, manufacturing applications,

tolerance methods and analysis, problem-solving techniques and general organizational skills.

Career opportunities include drafting and engineering technician, project technician, design technician, draftsman, and certified document technician. These career options play a critical role in product planning and the design of assembly parts and products which are to be fabricated and produced. With additional equipping and/or education, additional career options include mechanical engineer, commercial or industrial designer, civil engineer, product designer, and project designer.

Degree opportunities are:

CAD Mechanical Emphasis- this emphasis students are trained to be CAD technicians in manufacturing, engineering, fabrication, and other areas requiring production-ready drawings and solid 3-dimensional models. Assisting with the design of residential and commercial buildings in an architectural or construction office. Subject matter such as design principles, technical drawing, print reading, product documentation, and fabrication materials and methods are included.

CAD Robotics and Automation Emphasis - this emphasis students are prepared for entry level careers as a CAD technician in the robotics and automation field. Graduates become qualifies to work in electronic automation and in control systems environments. Students in this program are trained on the principles behind robotic and automation technology while focusing on principles of robotics, design, programming, operation of robotic systems, and robotics system maintenance topics such as programmable logic controllers, sensors and transducers, and fundamentals of DC/AC.

CAD HVAC Emphasis- this emphasis students are prepared for entry level careers as a CAD technician in the heating, air conditioning and refrigeration field. This field of work involves different trade disciplines in residential and commercial heating, ventilation, air conditioning, and refrigeration. This includes drafting technician positions in mechanical, electrical, and heating systems while learning basic refrigeration, fundamentals of gas heating, and electricity for HVAC systems for both residences, and large facilities.

Program Learning Outcomes

Upon completion of the Computer Aided Drafting and Design – Mechanical degree program, students should be able to:

- Read and interpret industry prints, using current drawing standards in dimensioning, symbology, linetypes, lineweights, drawing notes for working drawings, engineering assembly and design related manufacturing drawings
- Apply and integrate computer technology using the latest 2D and 3D CAD software to develop technical engineering drawings in two-dimensional multi-view and three-dimensional solid models in a manner that is efficient and compliant with standard industry practices
- Recall and define the principles and theory of manufacturing processes and basic operation of machine tools
- Determine part function and relationship to each other, to include tolerancing of parts for assemblies while calculating mating part conditions to guarantee parts fits
- Apply and diagnose Geometric Dimensioning and Tolerancing according to ASME Y14.5M – 1994 standards
- Define and apply proper design materials while identifying proper standard part vendors for design applications

- Compare additive manufacturing to traditional technologies and choose the best technology for a given application to include proper 3D printing materials and select appropriately for a given application
- Create rapid prototypes using additive manufacturing to include identifying vendor parts to make a functional prototype

Interested students should schedule appointments with CAD program advisor prior to enrolling. Students may address and complete prerequisite requirements with the beginning program courses. Students not meeting a course prerequisite must have prior permission in order to enroll in the course.

General Education Courses

CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
COM 225	Organizational Communication	3
ENG 131	Technical Writing I: CO1 or higher	3
MAT 107	Career Math or higher	3
	Three (3) additional credit hours from list below	<u>3</u>
		15

Three (3) additional credit hours

BUS 115	Introduction to Business	3
COM 125	Interpersonal Communication	3
PSY 100	Psychology of Workplace Relationships	3

Additional Required Courses (all emphasis areas)

CAD 100	Print Reading for Computer Aided Drafting	3
CAD 101	Computer Aided Drafting/2D I	3
CAD 102	Computer Aided Drafting/2D II	3
CAD 153	Introduction to Creo Basics	3
CAD 255	SolidWorks/Mechanical	3
EGT 103	Technical Drafting III	3
EGT 210	Mechanical Design III	<u>3</u>
		21

Emphasis Areas

HVAC

HVA 102	Basic Refrigeration	4
HVA 105	Electricity for HVAC/R	4
HVA 110	Fundamentals of Gas Heating	4
HVA 111	Piping Skills for HVAC	4
HVA 247	Hot Water Heating Systems	4
Electives	Choose six (6) hours from technical electives	<u>6</u>
		26

Total Hours for HVAC Degree Emphasis 62

Mechanical

EGT 205	Geometric Dimension & Tolerance	3
MAC 100	Machine Shop Safety	1
MAC 101	Introduction to Machine Shop	3
MAC 252	Practical Metallurgy	3
MTE 130	Metrology	3
MTE 247	Strengths of Materials	3
Electives	Choose nine (9) hours from technical electives	<u>9</u>
		25

Total Hours for Mechanical Degree Emphasis 61

Robotics & Automation

ELT 106	Fundamentals of DC/AC	4
ELT 146	Digital Devices in Computers	3
ELT 165	Electronic Assembly	3
ELT 252	Motors & Controls	3
ELT 258	Programmable Logic Controllers	3
ELT 266	Advanced Electronic Assemble	3

ELT 267	Introduction to Robotics	1
ELT 268	Robotics Technologies	3
Electives	Choose three (3) hours from technical electives	<u>3</u>
		26

Total Hours for Robotics & Automation Degree Emphasis 62

Technical Electives

CAD 202	Computer Aided Drafting/3D	3
CAD 240	Inventor I/Autodesk	3
CAD 253	Advanced Creo	3
CAD 259	Advanced SolidWorks	3
CAD 262	3D Printing/Additive Manufacturing	3
CAD 266	Advanced 3D Printing	3
CAD 280	Internship	3
MAC 110	Introduction to Engine Lathe	3
MAC 120	Introduction to Milling Machine	3
MAC 205	Introduction to CNC Milling Operations	3
MAC 206	CNC Milling Operations II	3
MAC 240	CAD/CAM 2D	3
MAC 241	CAD/CAM 2D Lab	3

Certificates

Advanced CAD Technical Skills

The Advanced CAD Technical Skills Certificate is designed for students to learn a variety of techniques and skills associated with print reading for computer aided drafting. Students will learn about linetype identification and the use of lineweights, file management, industry standards in dimensioning and how to read working drawings. Additionally, students will learn basic computer aided drafting skills using AutoCAD software, 2D CAD skills. Students will develop skills in industrial dimensioning techniques and apply the ASME Y14.5 standards, and the production of industrial working drawings and working models based on ASME standards.

Program Learning Outcomes

Upon completion of the Advanced CAD Technical Skills certificate program, students should be able to:

- Produce 2D printed/plotted drawings with AutoCAD software
- Interpret working drawings for various industries
- Produce industrial working drawings and models based on industry standards
- Reverse engineer assemblies to create working drawings in 2D plan and 3D models

CAD 100	Print Reading for Computer Aided Drafting	3
CAD 101	Computer Aided Drafting/2D I	3
CAD 102	Computer Aided Drafting/2D II	3
EGT 103	Technical Drafting III	3
EGT 210	Mechanical Design III	<u>3</u>

Total Credit Hours 15

Advanced SolidWorks Skills

The Advanced SolidWorks Skills one-semester certificate is for individuals who are working in the field or individuals in a related field wishing to obtain SolidWorks skills beyond the entry level and with prior knowledge of Mechanical Drafting. Drafting technicians whose skills are dated and wish to update, should select this certificate to gain those skills required in industry. Advanced applications of the 3D parametric software include management of design data, advanced assembly, analysis of model creations, documentation of bill of materials and parts lists, rendering, animation, and dynamic simulation and testing a model assembly.

Program Learning Outcomes

Upon completion of the Advanced SolidWorks Skills certificate program, students should be able to:

- Use the SolidWorks software package to create advanced models, parts, assemblies, and related documents (e.g. bill of materials, parts lists)
- Construct, modify, and manage complex parts in 3D space as well as to produce 2D drawings from the 3D models

CAD 255	SolidWorks/Mechanical	3
CAD 259	Advanced SolidWorks	3
Total Credit Hours		6

Basic CAD Skills

The Basic CAD Skills Certificate is designed for students to learn a variety of techniques and skills associated with print reading for computer aided drafting. Students will learn about linetype identification and the use of lineweights, file management, industry standards in dimensioning and how to read working drawings. Additionally, students will learn basic computer aided drafting skills using AutoCAD software, 2D CAD skills.

Program Learning Outcomes

Upon completion of the Basic CAD Skills certificate program, students should be able to:

- Produce 2D printed/plotted drawings with AutoCAD software
- Interpret working drawings for various industries

CAD 100	Print Reading for Computer Aided Drafting	3
CAD 101	Computer Aided Drafting/2D I	3
CAD 102	Computer Aided Drafting/2D II	3
Total Credit Hours		9

CAD-Quality Assurance

The CAD - Quality Assurance Certificate is designed for students to learn a variety of techniques and skills associated with print reading for computer aided drafting. Students will learn about linetype identification and the use of lineweights, file management, industry standards in dimensioning and how to read working drawings. Additionally, students learn how to interpret and apply geometric dimensioning and tolerancing in machining or drafting per the ASME Y14.5 specification. Students learn how to examine and interpret the generation of working drawings, and about the team effort amongst design, drafting, manufacturing, and quality control.

Program Learning Outcomes

Upon completion of the CAD-Quality Assurance certificate program, students should be able to:

- Apply geometric dimensioning and tolerancing (GDT) in machining/drafting
- Interpret working drawings for various industries
- Use common measuring instruments (e.g., Vernier, micrometer) found in manufacturing environments

CAD 100	Print Reading for Computer Aided Drafting	3
EGT 205	Geometric Dimension & Tolerance	3
MAT 107	Career Math or higher	3
MTE 130	Metrology	3
Total Credit Hours		12

CAD Skills for Interiors

The CAD Skills for Interiors Certificate is designed for students to learn a variety of techniques and skills associated with print reading for computer aided drafting. Students learn to use 2D and 3D computer aided drafting to develop their interior design skills, enhance their design process, and their ability to portray design concepts. Students use advanced 3D CAD software concepts to create rendered interior spaces. In addition, students are introduced to basic drafting tools and techniques and learn to draft floor plans and interior elevations.

Program Learning Outcomes

Upon completion of the CAD Skills for Interiors certificate program, students should be able to:

- Create 2D design plans and 3D visualization models and presentations for interior design applications using advanced AutoCAD and AutoDesk Revit software
- Produce construction documents (e.g., topographic site plans, elevations, 3D models, templates, and presentations) using AutoDesk Revit Architecture software
- Design interior projects to include floor plans, dimensions, elevations, sections, details, lighting, special features and finishes

CAD 105	AutoCAD for Interiors	4
CAD 215	Advanced CAD for Interiors	3
IND 111	Drafting for Interiors	4
Total Credit Hours		11

Modeling Design

The Modeling Design Certificate is designed for students to learn a variety of techniques and skills associated with print reading for computer aided drafting. Students learn to use Creo software to construct, modify, and manage complex parts in 3D space, as well as how to produce 2D drawings from 3D models. The focus is on advanced part creation, drawing manipulation, and documentation. Additionally, students build confidence in 3D thinking and progresses to three-dimensional parameters. Students learn how to use the 3D parametric software SolidWorks to focus on management of design data, advanced assembly, rendering, animation and dynamic simulation and testing a model assembly. Additionally, students learn how to create advanced 3D solid models using 3D printing and 3D scanning technology.

Program Learning Outcomes

Upon completion of the Modelling Design certificate program, students should be able to:

- Produce 2D drawings from 3D solid models
- Use the SolidWorks and Creo software packages to create advanced models, parts, assemblies, and related documents (e.g., bill of materials, parts lists)
- Produce parts and assemblies using additive manufacturing/3D printing

CAD 153	Introduction to Creo Basics	3
CAD 253	Advanced Creo	3
CAD 255	SolidWorks/Mechanical	3
CAD 259	Advanced SolidWorks	3
CAD 262	3D Printing/Additive Manufacturing	3
CAD 266	Advanced 3D Printing	3
Total Credit Hours		18

Professional CAD – Architecture

The Professional CAD - Architecture Certificate is designed for students to learn a variety of techniques and skills associated with print reading for computer aided drafting. Students learn about architectural drawing theory and light frame construction techniques and produce a professional set of construction drawings of a residential structure. Additionally, students acquire 2D architectural computer aided drafting skills using AutoCAD software, as well as learning to use Revit Architecture software to create floorplans, elevations, 3D models, topographic site plans, and presentation techniques.

Program Learning Outcomes

Upon completion of the Professional CAD - Architecture certificate program, students should be able to:

- Produce construction documents (e.g., topographic site plans, elevations, 3D models, templates, and presentations) using AutoDesk Revit Architecture software
- Produce professional sets of construction drawings for residential and commercial structures

AEC 102	Residential Construction Drawing	4
AEC 104	Architectural Drawing Theory	4
CAD 104	CAD for Architecture	4
CAD 224	Revit Architecture	3
CAD 227	Advanced Revit Architecture	3
Total Credit Hours		18

Professional CAD – Interior Design

The Professional CAD – Interior Design Certificate is designed for students to learn a variety of techniques and skills associated with print reading for computer aided drafting. Students will learn about linetype identification and the use of lineweights, file management, industry standards in dimensioning and how to read working drawings. Additionally, students acquire computer aided drafting skills using Revit Architecture software to create floorplans, elevations, 3D models, topographic site plans, and presentation techniques. In addition, students are introduced to basic drafting tools and techniques and learn to draft floor plans and interior elevations.

Program Learning Outcomes

Upon completion of the Professional CAD–Interior Design certificate program, students should be able to:

- Produce construction documents (e.g., floor plans, elevations, sections, details, 3D models, templates, and presentations) using AutoDesk Revit Architecture software
- Design interior projects to include floor plans, dimensions, elevations, sections, details, lighting, special features and finishes
- Apply materials, lighting, and cameras for presentation drawings
- Create 3D visualization models and presentations for interior design applications using advanced AutoDesk Revit software

CAD 105	AutoCAD for Interiors	4
CAD 215	Advanced CAD for Interiors	3
CAD 224	Revit Architecture	3
CAD 227	Advanced Revit Architecture	3
IND 111	Drafting for Interiors	4
Total Credit Hours		17

Professional CAD - Mechanical

The Professional CAD – Mechanical Certificate is designed for students to learn a variety of techniques and skills associated with print reading for computer aided drafting. Students will learn about linetype identification and the use of lineweights, file management, industry standards in dimensioning and how to read working drawings. Additionally, students will learn basic computer aided drafting skills using AutoCAD software, 2D CAD skills, and how to use Creo software. Students build confidence in 3D thinking and progresses to three-dimensional parameters. Students will develop skills in industrial dimensioning techniques and apply the ASME Y14.5 standards, and the production of industrial working drawings and working models based on ASME standards.

Program Learning Outcomes

Upon completion of the Professional CAD - Mechanical certificate program, students should be able to:

- Produce 2D and 3D printed/plotted drawings with AutoCAD software
- Interpret working drawings for various industries
- Produce industrial 2D working drawings and 3D models based on industry standards
- Produce 2D drawings from 3D models

CAD 100	Print Reading for Computer Aided Drafting	3
CAD 101	Computer Aided Drafting/2D I	3
CAD 102	Computer Aided Drafting/2D II	3
CAD 153	Introduction to Creo Basics	3
CAD 255	SolidWorks/Mechanical	3
EGT 103	Technical Drafting III	3
EGT 210	Mechanical Design III	3
MAT 107	Career Math	3
Electives	Choose six (6) hours from technical electives	6
Total Credit Hours		30

Revit Skills

This certificate is for students who are in industry and with prior knowledge of Interior Design and Architecture. Students will polish their 2D architectural computer aided drafting skills using AutoCAD software, as well as learn to use Revit Architecture software to create floorplans, elevations, 3D models, topographic site plans, and presentation techniques.

Program Learning Outcomes

Upon completion of the Revit Skills certificate program, students should be able to:

- Produce construction documents (e.g., topographic site plans, elevations, 3D models, templates, and presentations) using AutoDesk Revit Architecture software
- Create 3D visualization models and presentations for interior design applications using advanced AutoDesk Revit software

CAD 224	Revit Architecture	3
CAD 227	Advanced Revit Architecture	3
Total Credit Hours		6

Additional information available on the Computer Aided Drafting and Design – Mechanical Department website at www.pgcc.edu/computer-aided-drafting.

Computer Information Systems

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Algebraic Literacy

The Associate of Applied Science Degree in Computer Information Systems is designed for students who plan careers as information systems specialists. This program is designed for a student who plans to obtain an entry-level position in the information technology field. It provides a broad background that allows for free movement within the computer industry.

Students must have the ability to type 20 WPM or have completed BTE 100.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have the instructor permission to enroll.

Program Learning Outcomes

Upon completion of the Computer Information Systems degree program, students should be able to:

- Utilize office application software to present ideas and information clearly in digital and oral formats
- Research and demonstrate understanding of the information technology industry standards of ethical and professional conduct
- Collaborate effectively with others on a project in a workgroup
- Use skills and tools necessary for current computing practices
- Design, implement, and query relational database
- Professionally present themselves for potential employment

General Education Courses

CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
COM 115	Public Speaking	3
or		
COM 125	Interpersonal Communication	(3)
CSC 120	Problem Solving with (Software Package)	3
ENG 121	English Composition I: CO1	3
or		
ENG 131	Technical Writing I: CO1	(3)
MAT 121	College Algebra: MA1	4
		<hr/> 16

Additional Required Courses

CIS 115	Introduction to Computer Information Systems	3
CIS 124	Introduction to Operating Systems	3
CIS 130	Introduction to the Internet	1
CIS 145	Introduction to Desktop Database	3
CIS 155	Complete Spreadsheets: (Software package)	3
CIS 202	Automated Project Management	3
CIS 240	Database Design	3
CIS 263	PC Help Desk Skills	3
CIS 267	Management of Information Systems	3
CIS 280	Internship	3
or		
CIS 289	Capstone	(3)
CNG 101	Networking Fundamentals	3
CNG 121	Computer Technician I: A+	4

CSC 220	Introduction to Microsoft Visual Basic.NET	3
or		
CSC 160	Computer Science I: (Language)	(4)
CWB 110	Introduction to Web Authoring	3
CWB 221	Technology Foundations for E-Commerce	3
Elective	Choose three (3) hours from CIS, CNG, CSC, CWB, MGD (except CIS 118 or CSC 105)	3
		<hr/> 44-45

Total Credit Hours

63-64

Certificates

Computer Application Specialist

Industry runs on productivities software and technology. Made for both novices and current industry professionals, learn to gain proficiency in the most commonly used software applications.

Program Learning Outcomes

Upon completion of the Computer Applications Specialist certificate program, students should be able to:

- Create, edit, and format texts, tables, and charts
- Create and modify database objects such as tables, queries, forms, and reports
- Use basic to advanced features of spreadsheet software
- Use Microsoft Outlook functions and applications
- Create presentation materials to enhance communication

CIS 118	Introduction to PC Applications	3
CIS 135	Complete Word Processing	3
CIS 140	Microsoft Outlook	1
CIS 145	Introduction to Desktop Database	3
CIS 155	Complete Spreadsheets: (Software package)	3
CIS 165	Complete Presentation Graphics	3
		<hr/> 16

Total Credit Hours

16

Computer Support Technician

Good Information technology support can be the difference between success and failure in an organization. This certificate is designed to allow students to gain the skills necessary to troubleshoot technology issues and contribute to the success of an organization supported by technology.

Program Learning Outcomes

Upon completion of the Computer Support Technician certificate program, students should be able to:

- Assemble and upgrade desktop/laptop computers based on customer needs
- Troubleshoot hardware and software problems.
- Configure computer to connect to network
- Use customer service skills as an IT professional

CIS 118	Introduction to PC Applications	3
CIS 124	Introduction to Operating Systems	3
CIS 263	PC Help Desk Skills	3
CNG 101	Networking Fundamentals	3
CNG 104	Introduction to TCP/IP	3
CNG 121	Computer Technician I: A+	4
		<hr/> 19

Total Credit Hours

19

Database

Organizations rely on Information management as the backbone of their decision-making process. Students in this certificate will gain the skills necessary to develop, interpret, and make decisions based on data.

Program Learning Outcomes

Upon completion of the Database certificate program, students should be able to:

- Create and use relational databases using Structured Query Language (SQL)
- Create structured and logically correct computer programs
- Implement and test multiple computer programs
- Use high-level programming language to develop software applications

CIS 124	Introduction to Operating Systems	3
CIS 145	Introduction to Desktop Database	3
CIS 240	Database Design	3
CIS 243	Introduction to Structured Query Language (SQL)	3
CSC 120	Problem Solving with (Software Package)	3
or		
CSC 160	Computer Science I: (Language)	(4)
or		
CSC 119	Introduction to Programming	(3)
Total Credit Hours		15-16

Programming

Computer code is the fundamental building block of information systems and technology. Students will be able to code while studying specific computer coding languages used in industry today.

Program Learning Outcomes

Upon completion of the Programming certificate program, students should be able to:

- Create structured and logically correct computer programs
- Use high-level programming language to develop software applications
- Optimize computer architecture to enhance information transfer and control within a computer system

CSC 119	Introduction to Programming	3
CSC 160	Computer Science I: (Language)	4
CSC 161	Computer Science II: (Language)	4
CSC 217	Advanced Python Programming	3
CSC 225	Computer Architecture/Assembly Language Programming	4
Total Credit Hours		18

Additional information available on the Computer Information Systems Department website at www.pgcc.edu/cis.

Computer Networking Technology

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Algebraic Literacy

The Associate of Applied Science Degree provides students with practical and relevant skills in the field of Computer Networking and Information Technology. In addition to obtaining an Associate of Applied Science Degree, the program provides a foundation for students to further achieve industry certifications such as CompTIA Network+, CompTIA Security+, EC-Council's CEH (Certified Ethical Hacker) and CCNA (Cisco Certified Network Associate). Students completing this program will be able to demonstrate knowledge of computer software, computer hardware, network operating systems, networking device configuration, network administration, network security risks, cyber security threats and countermeasures specialized hardware and software defenses, and forensic analysis. Students entering this program should have a good foundation in math and reading, as well as basic familiarity with Microsoft Windows and internet browsers. Students may be advised to take additional courses to prepare them for the degree program.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

Program Learning Outcomes

Upon completion of the Computer Networking Technology degree program, students should be able to:

- Analyze, design, install, configure, document, and troubleshoot network and system hardware and operating systems
- Implement LANs using both static and dynamic addressing techniques, including subnetting
- Identify risks, assess threats, and develop effective countermeasures aimed at protecting computer assets and data
- Communicate effectively both orally and in writing, using proper computer system and networking terminology
- Work as an effective member of a team

Emphasis Areas

Cisco

General Education Courses

CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
COM 125	Interpersonal Communication	3
CSC 120	Problem Solving with (Software Package)	3
ENG 131	Technical Writing I: CO1	3
MAT 121	College Algebra: MA1	4
		16

Additional Required Courses

CIS 124	Introduction to Operating Systems	3
CIS 155	Complete Spreadsheets: (Software package)	3
CIS 202	Automated Project Management	3
CIS 267	Management of Information Systems	3
CNG 132	Network Security Fundamentals	3

CNG 257	Network Defense & Counter Measures	3
CNG 260	Cisco Network Associate I	5
CNG 261	Cisco Network Associate II	5
CNG 262	Cisco Network Associate III	5
CNG 263	Cisco Network Associate IV	5
Electives	Choose six (6) hours from the list below	6
		<hr/>
		44

Total Credit Hours for Cisco Emphasis **60**

Electives

Choose six (6) hours from any courses within the disciplines of BUS, CIS, CNG, CSC, CWB, MAN, MAR, MGD except CIS 118, CNG 101, CSC 105, and MGD 104.

Network+

General Education Courses

CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
COM 125	Interpersonal Communication	3
CSC 120	Problem Solving with (Software Package)	3
ENG 131	Technical Writing I: CO1	3
MAT 121	College Algebra: MA1	4
		<hr/>
		16

Additional Required Courses

CIS 124	Introduction to Operating Systems	3
CIS 155	Complete Spreadsheets: (Software package)	3
CIS 202	Automated Project Management	3
CIS 267	Management of Information Systems	3
CNG 132	Network Security Fundamentals	3
CNG 257	Network Defense & Counter Measures	3
CIS 223	Linux	3
CNG 101	Networking Fundamentals	3
CNG 102	Local Area Networks	3
CNG 104	Introduction to TCP/IP	3
CNG 108	Network Analysis & Design	3
CWB 110	Introduction to Web Authoring	3
CWB 221	Technology Foundations for E-Commerce	3
Electives	Choose six (6) hours from the list below	6
		<hr/>
		45

Total Credit Hours for Network+ Emphasis **61**

Electives

Choose six (6) hours from any courses within the disciplines of BUS, CIS, CNG, CSC, CWB, MAN, MAR, MGD except CIS 118, CNG 101, CSC 105, and MGD 104.

Certificates

The Computer Networking Technology certificate provides students with practical and relevant skills in the field of Computer Networking and Information Technology. The Certificate program provides a foundation for students to further achieve industry certifications such as CompTIA Network+ and CCNA (Cisco Certified Network Associate). Students completing this program will be able to demonstrate knowledge of computer software, computer hardware, network operating systems, networking device configuration, and network administration. Students entering this program should have a good foundation in math and reading, as well as basic familiarity with Microsoft Windows and internet browsers. Students may be advised to take additional courses to prepare them for the degree program.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have the instructor permission to enroll.

CCNA

This certificate allows students to apply networking practices while being fully certified as a Cisco Network Associate.

Program Learning Outcomes

Upon completion of the CCNA certificate program, students should be able to:

- Use basic to advanced features of spreadsheet software
- Design network architecture
- Monitor and troubleshoot network operations
- Create Web documents

CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
CIS 124	Introduction to Operating Systems	3
CIS 155	Complete Spreadsheets: (Software package)	3
CNG 260	Cisco Network Associate I	5
CNG 261	Cisco Network Associate II	5
CNG 262	Cisco Network Associate III	5
CNG 263	Cisco Network Associate IV	5
CWB 110	Introduction to Web Authoring	3
		<hr/>
		32

Total Credit Hours

Cisco Certified Network Associate

This certificate program prepares students to design, build, and maintain networks capable of supporting national and global organizations. Course work covers a complete range of basic through advanced networking concepts from pulling cable to such complex concepts as subnet masking rules and strategies. Methods of learning are varied with interactive on-line lessons, texts, movies, and extensive hands-on applications. Upon successful completion, the program graduate is qualified to take the Cisco Networking Associate Certification examination.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

Program Learning Outcomes

Upon completion of the Cisco Certified Network Associate certificate program, students should be able to:

- Design network architecture
- Monitor and troubleshoot network operations

CNG 260	Cisco Network Associate I	5
CNG 261	Cisco Network Associate II	5
CNG 262	Cisco Network Associate III	5
CNG 263	Cisco Network Associate IV	5
		<hr/>
		20

Total Credit Hours

Cyber Security

The Cyber Security certificate prepares students for an entry level position in the fields of cyber security and computer networking. This certificate provides a foundation for students to achieve industry certifications, such as CompTIA's Security+ and EC-Council's Certified Ethical Hacker. Students completing the certificate will be able to demonstrate knowledge of networking basics, network security risks, cyber security threats & countermeasures, specialized hardware & software defenses, and forensic analysis. Students entering this certificate program should have a good foundation in math and reading, as well as basic familiarity with Microsoft Windows and internet browsers.

Students may be advised to take additional courses to prepare them for the certificate program. Students not meeting a course prerequisite must have instructor permission to enroll.

Program Learning Outcomes

Upon completion of the Cyber Security certificate program, students should be able to:

- Build and configure networks using routers and switches
- Evaluate cyber risks and associated security countermeasures
- Design network defense strategies

CIS 223	Linux	3
CNG 101	Networking Fundamentals	3
CNG 104	Introduction to TCP/IP	3
	or	
CNG 260	Cisco Network Associate I	(5)
CNG 102	Local Area Networks	3
CNG 132	Network Security Fundamentals	3
CNG 257	Network Defense & Counter Measures	3
Total Credit Hours		17-18

Network+

This certificate is designed to prepare students to build the skills necessary to test for and be awarded Network + certification which certifies an IT professional's expertise in managing, maintaining, troubleshooting, installing, and configuring basic computer networks.

Program Learning Outcomes

Upon completion of the Network+ certificate program, students should be able to:

- Build and configure networks using routers and switches
- Use basic to advanced features of spreadsheet software
- Create Web documents
- Develop the technological infrastructure supporting an electronic-commerce website

CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
CIS 124	Introduction to Operating Systems	3
CIS 155	Complete Spreadsheets: (Software package)	3
CIS 223	Linux	3
CNG 101	Networking Fundamentals	3
CNG 102	Local Area Networks	3
CNG 104	Introduction to TCP/IP	3
CWB 110	Introduction to Web Authoring	3
CWB 221	Technology Foundations for E-Commerce	3
Total Credit Hours		27

Additional information available on the Computer Networking Department website at www.ppcc.edu/cng.

Criminal Justice

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

The Criminal Justice Program at PPCC is designed to upgrade the skills and knowledge of employed criminal justice professionals, and to provide a pre-employment or transfer program to students interested in the field, or in continuing on to a four-year school.

The student seeking an AAS degree, or the professional employed in the field can upgrade their skills for hiring, advancement and promotion. PPCC offers one of the broadest ranges of course offerings in the nation.

An AAS degree from PPCC will open doors into many opportunities in law enforcement at the state, federal and local level. Our students have gone on to careers in Criminal Investigations, as Crime Scene Investigators, Corrections officers, State and Federal Probation and Parole officers, and many others. Several PPCC graduates have advanced to become chiefs of police and sheriffs.

Students should realize, however, that a degree from PPCC will not guarantee a position with an agency in the criminal justice field. Many agencies impose requirements other than education for employment. These requirements may be related to age, physical condition, height, weight, and vision. The majority of employers in the criminal justice field will not hire persons with a felony conviction, or a lengthy history of drug use. Some arrests and/or convictions for certain crimes will also be disqualifiers. Employers in the field screen for certain psychological and personality traits, and many give pre-employment polygraph tests.

Prospective students with questions concerning the foregoing should consult with faculty advisors.

Program Learning Outcomes

Upon completion of the Criminal Justice degree program, students should be able to:

- Explain the origins of criminal behavior, society's response to crime, and the consequences of crime to our society, utilizing multiple perspectives
- Explain social injustices and social harms within criminal justice systems
- Compare theoretical frameworks to the causes and prevention of crime, the processes of criminalization, and the impact that crime has on society
- Discuss the relationships between the courtroom and its procedures, the criminal law, and issues of criminal procedure (due process vs. crime control)
- Document police-related activities through effective report-writing
- Differentiate and explain the key roles in the core criminal justice areas (law enforcement, law, and corrections)

General Education Courses

CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
ENG 121	English Composition I: CO1	3
or		
ENG 131	Technical Writing I: CO1	(3)
ENG 122	English Composition II: CO2	3
or		
COM 115	Public Speaking	(3)
or		
POS 125	American State & Local Government: SS1	(3)
MAT 107	Career Math	3
or		
MAT 120	Mathematics for the Liberal Arts: MA1 or higher	(4)
PSY 112	Psychology of Adjustment	3
Elective	AAS General Education Elective course	3
		18-19

Additional Required Courses

CRJ 110	Introduction to Criminal Justice: SS3	3
CRJ 125	Policing Systems	3
CRJ 135	Judicial Function	3
CRJ 145	Correctional Process	3
CRJ 205	Principles of Criminal Law	3
LEA 118	Police Report Writing	3
Electives	Choose twenty-four (24) credit hours from list below	24
		42
Total Credit Hours		60-61

Electives

CRJ 127	Crime Scene Investigation	3
CRJ 209	Criminal Investigation I	3
CRJ 220	Human Relations & Social Conflict	3
CRJ 225	Crisis Intervention	3
CRJ 230	Criminology	3
CRJ 231	Introduction to Forensic Science & Criminalistics	3
CRJ 235	Delinquent Behavior	3
CRJ 257	Victimology	3
CRJ 268	Criminal Profiling	3
CRJ 280	Internship	3

Certificates

Basic Criminology

This certificate provides an understanding of the causes, consequences, and the prevention of crime in society. Students will understand the nature of crime, how crime is managed, and the impact crime has on society.

Program Learning Outcomes

Upon completion of the Basic Criminology certificate program, students should be able to:

- Discuss the theories of adolescent delinquency, including factors contributing to it
- Discuss the theories of crime causation in relation to crime control
- Critique the criminal justice process and interaction/conflict between criminal justice agencies

CRJ 110	Introduction to Criminal Justice: SS3	3
CRJ 230	Criminology	3
CRJ 235	Delinquent Behavior	3
		9

Total Credit Hours

Basic Investigations

This certificate program provides an understanding of investigation, collection, and process of evidence from the crime scene to the courtroom. Students may choose this certificate as it may provide an opportunity to work in a non-sworn entry-level position in a law enforcement agency, such as an evidence technician.

Program Learning Outcomes

Upon completion of the Basic Investigations certificate program, students should be able to:

- Conduct a preliminary investigation of a crime scene (e.g., securing the scene, conducting interviews, collecting evidence using forensic science)
- Analyze fingerprint and trace evidence collected at a crime scene
- Document police-related activities

CRJ 127	Crime Scene Investigation	3
CRJ 209	Criminal Investigation I	3
CRJ 231	Introduction to Forensic Science & Criminalistics	3
LEA 118	Police Report Writing	3
		12

Total Credit Hours

Behavior Studies

This certificate provides an understanding of the different theories of criminology that attempt to explain why people commit crimes and explore the minds of serial offenders and other offenders who victimize people within society. Students will study various theories of crime causation, and specifically individual and sociological influences.

Program Learning Outcomes

Upon completion of the Behavior Studies certificate program, students should be able to:

- Discuss the theories of crime causation in relation to criminal profiling and crime control
- Discuss the theories of adolescent delinquency, including factors contributing to it
- Employ conflict resolution techniques

CRJ 220	Human Relations & Social Conflict	3
CRJ 230	Criminology	3
CRJ 235	Delinquent Behavior	3
CRJ 268	Criminal Profiling	3
		12

Total Credit Hours

Criminal Justice Basic

This certificate explores historical and current aspects of the criminal justice system. Students will study topics in the areas of policing, judicial systems, and correctional systems.

Program Learning Outcomes

Upon completion of the Criminal Justice Basic certificate program, students should be able to:

- Discuss the theories of crime causation in relation to crime control
- Discuss the criminal justice process and the dual court system
- Conduct a preliminary investigation of a crime scene (e.g., securing the scene, conducting interviews, collecting evidence)

CRJ 110	Introduction to Criminal Justice: SS3	3
CRJ 135	Judicial Function	3
CRJ 209	Criminal Investigation I	3
CRJ 230	Criminology	3
Total Credit Hours		12

Additional information available on the Criminal Justice Department website at www.pgcc.edu/crj.

Culinary Arts

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Culinary Arts continues to be one of the fastest growing career fields in the world. The culinary profession is a field different from most others, as it demands unusual circumstances and lengthy hours. The traits necessary to become a Culinarian are dedication, endurance and ambition. Upon completion, the student will be able to work in a professional establishment as a second cook or station supervisor.

Students entering this course of study will be required to have completed or demonstrated proficiency equivalent to the completion of College Reading & Writing Literacy, College Quantitative Literacy, CUA 100, CUA 101, and must pass the national ServSafe Certification prior to enrolling into future Culinary Arts lab courses. Students must see a faculty advisor before registering for this program.

Program Learning Outcomes

Upon completion of the Culinary Arts degree program, students should be able to:

- Identify proper ServSafe sanitation practices
- Properly outline a HACCP recipe
- Demonstrate proficiency in basic culinary weight and volume measuring, and proper recipe conversion including high altitude adjustment
- Demonstrate proper knife care, handling, and usage
- Prepare and evaluate classical recipe preparations
- Demonstrate basic cake decorating techniques
- Demonstrate competency in food costing and menu pricing and analyze a practical food bid sheet
- Prepare a basic business plan for a restaurant, catering company, or any food venue (food truck, pop-up kitchen, etc.)
- Conduct a detailed nutritional analysis

General Education Courses

BUS 115	Introduction to Business	3
CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
ENG 131	Technical Writing I: CO1	3
MAT 112	Financial Mathematics	3
PSY 100	Psychology of Workplace Relationships	3
		15

Emphasis Areas

Baking and Pastry

This two-year program is designed for students seeking advanced employment in the baking and pastry field as assistant pastry chefs, or as a bakeshop station chef. During the course of study, students will learn and demonstrate basic baking skills, equipment, decorating, showpieces, breads, advanced desserts, and wedding cakes. Students will also be trained in sanitation, cost controls, purchasing, management skills, and nutrition.

Examinations will be given throughout the program. Once a student completes the AAS Baking and Pastry Arts Program, they can apply for certification with the American Culinary Federation to become a Certified Pastry Cook (CPC). Students entering this course of study will be required to have completed or demonstrated proficiency equivalent to the completion of College Reading & Writing Literacy, College Quantitative Literacy, CUA 100, CUA 101, and must pass the national ServSafe Certification prior to enrolling into future Culinary Arts lab courses. Students must see a faculty advisor before registering for this program.

Program Learning Outcomes

Upon completion of the Baking and Pastry degree program, students should be able to:

- Identify proper ServSafe sanitation practices
- Demonstrate proper knife care and handling
- Demonstrate how to properly cut and layer a cake accurately
- Demonstrate a balanced dessert plating
- Understand basic baking techniques
- Prepare yeast and unleavened breads
- Evaluate pastry tools and equipment, and their functions
- Design and prepare an elegant wedding cake
- Prepare a variety of dessert sauces
- Demonstrate proficiency in basic culinary weight, volume measuring, and recipe conversions

Additional Required Courses

CUA 100	Culinary Program Fundamentals	3
CUA 101	Food Safety & Sanitation	2
CUA 105	Food Service Concepts & Management Skills	3
CUA 125	Introduction to Foods	4
CUA 127	Soups, Sauces & Consommés	3
CUA 145	Introduction to Baking	4
CUA 150	Baking: Decorating & Presentation	3
CUA 151	Baking: Intermediate Bread Preparation	3
CUA 152	Individual Fancy Dessert Production	3
CUA 153	Confectionaries & Petit Fours	3
CUA 154	Introduction to the Business of Catering	3
CUA 156	Nutrition for the Hospitality Professional	3
CUA 161	Advanced Cake Decorating-Wedding Cakes	2
CUA 236	Advanced Baking	2
CUA 262	Purchasing for the Hospitality Industry	3
CUA 281	Internship	4
		48
Total Credit Hours for Baking and Pastry Emphasis		63

Culinary Arts

The AAS Degree Program focuses on every aspect of working in a professional kitchen. Students will be trained in the following areas of study; basic food prep, sanitation, nutrition, supervision, baking, catering, wines and spirits, gardé manger (cold kitchen), purchasing, and soups, sauces, and consommés. Students will also be required to complete an on the job internship prior to graduation.

Once a student completes the AAS Culinary Arts Program, they can apply for certification with the American Culinary Federation to become a Certified Cook (CC). The Culinary Program encourages the students to receive certification due to the increase of positions in the United States that require an individual to be certified to work in different professional establishments.

Additional Required Courses

CUA 100	Culinary Program Fundamentals	3
CUA 101	Food Safety & Sanitation	2
CUA 105	Food Service Concepts & Management Skills	3
CUA 120	Wines & Spirits	2
CUA 125	Introduction to Foods	4
CUA 127	Soups, Sauces & Consommés	3
CUA 129	Center of the Plate	4
CUA 145	Introduction to Baking	4
CUA 154	Introduction to the Business of Catering	3
CUA 156	Nutrition for the Hospitality Professional	3
CUA 210	Advanced Cuisine & Gardé Manger	4
CUA 233	Advanced Line Prep & Cookery	4
CUA 245	International Cuisine	2
CUA 262	Purchasing for the Hospitality Industry	3
CUA 281	Internship	4
		48

Total Credit Hours for Culinary Arts Emphasis 63

Food Service Management

The AAS Degree Program focuses on the aspect of management in a professional food service operation. Students will be trained in the following areas of study; basic food prep, sanitation, cost controls, purchasing, legal aspects, nutrition, catering, beverages management, and supervision skills.

Students will also be required to complete an on the job internship prior to graduation.

Students may also take the national examinations by the National Restaurant Association Educational Foundation throughout the degree. Students that complete and pass the required exams will be eligible to receive the Manage First Professional Credential with the documentation of 800 hours industry related training.

Students entering this course of study will be required to have completed or demonstrated proficiency equivalent to the completion of College Reading & Writing Literacy, College Quantitative Literacy, CUA 100, CUA 101, and must pass the national ServSafe Certification prior to enrolling into future Culinary Arts lab courses. Students must see a faculty advisor before registering for this program.

Program Learning Outcomes

Upon completion of the Food Service degree program, students should be able to:

- Identify proper ServSafe sanitation practices
- Demonstrate proficiency in basic culinary weight and volume measuring

- and proper recipe conversion, including high altitude adjustments
- Properly demonstrate Food Costing and Menu Pricing
- Create a basic food service Business Plan
- Create a Marketing Plan for a food service operation
- Understand basic Laws and Regulations affecting the food service industry
- Understand how to manage a team and develop leadership skills
- Demonstrate Customer service techniques
- Design and evaluate a proper dining room table set up

Additional Required Courses

CUA 100	Culinary Program Fundamentals	3
CUA 101	Food Safety & Sanitation	2
CUA 120	Wines & Spirits	2
CUA 125	Introduction to Foods	4
CUA 136	Alcohol & Bartending Management	2
CUA 154	Introduction to the Business of Catering	3
CUA 156	Nutrition for the Hospitality Professional	3
CUA 157	Menu Planning	3
CUA 190	Dining Room Management	4
CUA 255	Supervision in the Hospitality Industry	3
CUA 256	Marketing in the Hospitality Industry	3
CUA 261	Cost Controls	3
CUA 262	Purchasing for the Hospitality Industry	3
CUA 263	Legal Aspects of Hospitality Management	3
CUA 281	Internship	4
		45

Total Credit Hours for Food Service Management Emphasis 60

Sustainability Management and Dietary Cuisine

This program is designed for students that seek employment in the food service employment industry with a focus on dietary and environmental sustainability practices to meet the future needs of the foods service industry. Employment opportunities include culinary and management careers in the health care industry, institutional operations with special dietary needs, operations that serve high-risk populations, and operations that utilize sustainability practices. Students will learn skills and understanding in human nutrition, menu development, cultural cuisines, sustainability practices, dietary cuisine, environmental impacts and concerns, and using the farm to fork concept within the industry. Examinations will be given throughout the program.

Students entering this course of study will be required to have completed or demonstrated proficiency equivalent to the completion of College Reading & Writing Literacy, College Quantitative Literacy, CUA 100, CUA 101, and must pass the national ServSafe Certification prior to enrolling into future Culinary Arts lab courses. Students must see a faculty advisor before registering for this program.

Program Learning Outcomes

Upon completion of the Sustainability Management and Dietary degree program, students should be able to:

- Identify proper ServSafe sanitation practices
- Properly demonstrate Food Costing and Menu Pricing
- Create a basic food service Business Plan
- Create a Marketing Plan for a food service operation
- Demonstrate basic cooking and baking techniques
- Develop a Nutritionally Balanced Menu
- Evaluate a recipe and make substitutes for better nutrition

- Identify methods to reduce a food service operations carbon footprint
- Prepare menus for various dietary needs and restrictions
- Identify religious dietary restrictions and prepare menus to accommodate these needs

General Education Courses

BUS 115	Introduction to Business	3
CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
ENG 131	Technical Writing I: CO1	3
ENV 101	Environmental Science w/Lab: SC1	4
MAT 112	Financial Mathematics	3
PSY 100	Psychology of Workplace Relationships	3
		<u>19</u>

Additional Required Courses

CUA 100	Culinary Program Fundamentals	3
CUA 101	Food Safety & Sanitation	2
CUA 105	Food Service Concepts & Management Skills	3
CUA 125	Introduction to Foods	4
CUA 145	Introduction to Baking	4
CUA 156	Nutrition for the Hospitality Professional	3
CUA 157	Menu Planning	3
CUA 245	International Cuisine	2
CUA 261	Cost Controls	3
CUA 262	Purchasing for the Hospitality Industry	3
CUA 264	Sustainable Food Service Operations	3
CUA 268	Vegetarian & Dietary Cuisine	3
CUA 269	Dietary Baking	2
CUA 281	Internship	4
		<u>42</u>

Total Credit Hours for Sustainability Management & Dietary Cuisine Emphasis **61**

Certificates

Students will be required to have completed or demonstrated proficiency equivalent to the completion of College Reading & Writing Literacy, College Quantitative Literacy, CUA 100, CUA 101, and must pass the national ServSafe Certification prior to enrolling into future Culinary Arts lab courses. Students must see a faculty advisor before registering for this program.

Baking

This program will prepare students for employment in baking and the art of pastries. The certificate program will develop the students' skills and understanding in the areas of chocolates, confections items, ice creams and frozen desserts, yeast products, quick breads, sculpted items, sugar work, use of fruits, and national desserts. Students completing the certificate program could find employment in these specific areas: baker, baking assistant, journeyman baker, cake decorator, candy maker, or pastry cook. Examinations will be given throughout the duration of the program.

Program Learning Outcomes

Upon completion of the Baking certificate program, students should be able to:

- Identify and operate common tools and equipment used in a commercial bakeshop
- Prepare and present a variety of baked goods and desserts
- Create menus for different styles of bakery establishments

- Calculate costs associated with producing various baked goods and desserts
- Apply food safety and sanitation standards to prevent foodborne illness

CUA 100	Culinary Program Fundamentals	3
CUA 101	Food Safety & Sanitation	2
CUA 105	Food Service Concepts & Management Skills	3
CUA 145	Introduction to Baking	4
CUA 150	Baking: Decorating & Presentation	3
CUA 151	Baking: Intermediate Bread Preparation	3
CUA 152	Individual Fancy Dessert Production	3
CUA 156	Nutrition for the Hospitality Professional	3
CUA 236	Advanced Baking	2
CUA 262	Purchasing for the Hospitality Industry	3
		<u>39</u>

Total Credit Hours **29**

Basic Skills

This certificate is designed for students seeking basic skills to enter the food services field. Students will learn national sanitation standards, management skills, and introduction to baking and cooking skills. Students will obtain the knowledge to work as a station cook with a food service establishment upon completion of this program. Examinations will be given throughout the program.

Program Learning Outcomes

Upon completion of the Culinary Arts Basic Skills certificate program, students should be able to:

- Identify and operate common tools and equipment used in a commercial kitchen
- Produce a variety of items using common cooking techniques
- Apply food safety and sanitation standards to prevent foodborne illness

CUA 100	Culinary Program Fundamentals	3
CUA 101	Food Safety & Sanitation	2
CUA 103	Introduction to Sanitation & Production	3
CUA 105	Food Service Concepts & Management Skills	3
CUA 125	Introduction to Foods	4
CUA 138	Food & Beverage Service	2
CUA 145	Introduction to Baking	4
		<u>21</u>

Total Credit Hours **21**

Culinary Arts

This program is designed for students who seek employment as a journeyman cook, station cook, or entry level cook in a professional establishment. Students will develop skills and understanding of line cookery, basic baking, saucier station, production, nutrition, sanitation, menu planning, cold food production, and entree preparation. Examinations will be given throughout the program.

Program Learning Outcomes

Upon completion of the Culinary Arts certificate program, students should be able to:

- Create menus for different styles of food service establishments
- Prepare and produce the five mother sauces and derivatives
- Prepare center of the plate entrees using common cooking methods
- Plan and prepare food display items for buffets and banquets
- Apply food safety and sanitation standards to prevent foodborne illness

CUA 100	Culinary Program Fundamentals	3
CUA 101	Food Safety & Sanitation	2
CUA 105	Food Service Concepts & Management Skills	3
CUA 125	Introduction to Foods	4
CUA 127	Soups, Sauces & Consommés	3
CUA 129	Center of the Plate	4
CUA 145	Introduction to Baking	4
CUA 156	Nutrition for the Hospitality Professional	3
CUA 210	Advanced Cuisine & Gardé Manger	4
CUA 233	Advanced Line Prep & Cookery	4

Total Credit Hours **34**

Food Service Management

This program is designed for students who seek employment as supervisor in food service management. Students will learn skills and understanding in cost controls, employee management, marketing, sanitation standards, basic nutrition, menu development, establishment concepts, customer and business legalities, catering, wine selection, basic cooking, and purchasing. Examinations will be given throughout the program.

Program Learning Outcomes

Upon completion of the Food Service Management certificate program, students should be able to:

- Create and supervise the execution of menus for different styles of food service establishments
- Recruit and supervise food service personnel
- Develop a marketing plan based upon common marketing models and research methods
- Plan and implement catering functions
- Discuss legal aspects of hospitality management

CUA 100	Culinary Program Fundamentals	3
CUA 101	Food Safety & Sanitation	2
CUA 105	Food Service Concepts & Management Skills	3
CUA 120	Wines & Spirits	2
CUA 125	Introduction to Foods	4
CUA 154	Introduction to the Business of Catering	3
CUA 156	Marketing in the Hospitality Industry	3
CUA 190	Dining Room Management	4
CUA 256	Marketing in the Hospitality Industry	3
CUA 261	Cost Controls	3
CUA 262	Purchasing for the Hospitality Industry	3
CUA 263	Legal Aspects of Hospitality Management	3

Total Credit Hours **36**

Additional information available on the Culinary Arts Department website at www.pgcc.edu/cua.

Cyber Security

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Algebraic Literacy

The Cyber Security degree provides students with practical and relevant skills in the field of cyber security, information technology, and computer networking. Students completing the degree will be able to demonstrate knowledge of computer software, hardware, and cyber security risks. The Cyber Security degree provides students foundation knowledge of cyber security threats, as well as procedures to mitigate computer and network security risks. This degree also includes strategies and techniques to manage access control, telecommunications & network security,

information security governance & risk management, software development security, cryptography, security architecture & design, operations security, business continuity & disaster recovery planning, legal, regulations, investigations & compliance, and physical security.

Program Learning Outcomes

Upon completion of the Cyber Security degree program, students should be able to:

- Apply the OSI Model and associated communications protocols
- Analyze, design, install, configure, document, and troubleshoot network and system hardware and operating systems
- Implement LANs using both static and dynamic addressing techniques, including subnetting
- Identify risks, assess threats, and develop effective countermeasures aimed at protecting computer assets and data
- Test perimeter defense configurations and penetration
- Apply scripting and programming skills to test and secure software
- Communicate effectively both orally and in writing, using proper computer system and networking terminology

General Education Courses

CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
COM 115	Public Speaking	3
or		
COM 125	Interpersonal Communication	(3)
ENG 131	Technical Writing I: CO1	3
MAT 121	College Algebra: MA1	4
SOC 218	Sociology of Diversity: SS3	3
		<u>16</u>

Additional Required Courses

CIS 124	Introduction to Operating Systems	3
CIS 223	Linux	3
CNG 101	Networking Fundamentals	3
and		
CNG 104	Introduction to TCP/IP	3
or		
CNG 260	Cisco Network Associate I	(5)
CNG 102	Local Area Networks	3
CNG 132	Network Security Fundamentals	3
CNG 257	Network Defense & Counter Measures	3
CNG 261	Cisco Network Associate II	5
CNG 270	Cisco Certified Network Associate, Security	5
CNG 280	Internship	3
CSC 119	Introduction to Programming: (Programming Language)	3
CSC 129	Introduction to Secure Coding	3
CSC 217	Advanced Python Programming	3
Electives	Choose three (3) hours from the list below	3

45-46

Total Credit Hours

61-62

Electives

Choose three (3) hours from any courses within the disciplines of BUS, CIS, CNG, CSC, CWB.

Additional information available on the Cyber Security Department website at www.pgcc.edu/cybersecurity.

Dental Assisting

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

A dental assistant is a skilled and essential member of the dental health care team in the delivery of preventive and restorative dentistry. The continuing demand for dental assistants makes this program an opportunity for a productive career.

The Dental Assisting certificate program prepares students for employment as chair-side dental assistants. In addition to the prescribed coursework, a minimum of 300 clinical hours is required to complete the program. Students must provide their own transportation to their clinical sites. A complete physical examination is required prior to the beginning of the clinical experience, and a Hepatitis B vaccination is strongly recommended.

Students must be at least 18 years of age before enrolling in Dental Radiology courses. Students must earn a C or better in all dental assisting and general education courses in order to graduate. Students must submit to a criminal background check and a drug screening prior to entering their clinical internship assignments. (Student fees for these tests apply.)

The program in Dental Assisting is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of Approval Without Reporting Requirements. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611-2678. The Commission's web address is www.ada.org/en/coda.

Graduates of the certificate program are eligible to take the Dental Assisting National Board (DANB) Examination. Successful completion of the DANB Examination awards students the status of Certified Dental Assistant (CDA).

Students who wish to pursue the Associate of Applied Science Degree in Dental Assisting must be a graduate of an ADA accredited dental assisting certificate program. Students participating in the AAS Degree program will be given instruction, laboratory experience, and clinical experience in expanded functions as permitted by the Dental Practice Law of Colorado. Students who wish to develop skills as an expanded functions dental assistant but, are not graduates of an ADA accredited dental assisting program, must be a Certified Dental Assistant or have a minimum of two years of full-time documented experience as a chairside dental assistant, preferably in a general dentistry practice.

Students who are interested in either the certificate program or the AAS degree program must meet with a dental assisting program advisor prior to enrolling in any dental assisting courses.

Program Learning Outcomes

Upon completion of the Dental Assisting degree program, students should be able to:

- Assist a variety of procedures in the dental office in a professional manner
- Identify uses of and manipulate a variety of dental materials to clinical standards
- Produce a variety of intra-oral and extra-oral radiographs of diagnostic quality
- Perform infection control procedures consistent with current industry standards
- Maintain accurate dental records
- Anticipate and identify potential medical emergencies that can arise before, during and after treatment
- Perform a variety of business office duties
- Provide restorative services to clinical competency
- Solve problems using critical thinking and principles of ethics
- Communicate with dental team members and patients in a professional manner

General Education Courses

CIS 118	Introduction to PC Applications	3
COM 115	Public Speaking	3
or		
COM 125	Interpersonal Communication	(3)
or		
COM 225	Organizational Communication	(3)
ENG 121	English Composition I: CO1	3
MAT 107	Career Math	3
PSY 101	General Psychology I: SS3	3
		<hr/> 15

Additional Required Courses

DEA 102	Principles of Clinical Practice	3
DEA 104	Specialties of Dentistry	2
DEA 111	Dental Office Management	2
DEA 120	Introduction to Dental Practices	1
DEA 121	Dental Science I	3
DEA 122	Dental Science II	3
DEA 123	Dental Materials I	3
DEA 124	Dental Materials II	3
DEA 125	Dental Radiography	3
DEA 126	Infection Control	3
DEA 131	Advanced Dental Radiography	3
DEA 132	Medical Emergencies in the Dental Office	2
DEA 134	Prevention & Nutrition in Dentistry	3
DEA 140	Dental Assisting National Board Review	1
DEA 181	Clinical Internship I	1
DEA 182	Clinical Internship II & Seminar	6
DEA 200	Introduction to Expanded Functions	4
DEA 205	Expanded Functions for Dental Auxiliary	4
		<hr/> 50

Total Credit Hours **65**

Certificate

Dental Assisting

A dental assistant is a skilled and essential member of the dental health care team in the delivery of preventive and restorative dentistry. The continuing demand for dental assistants makes this program an opportunity for a productive career. The Dental Assisting certificate program prepares students for employment as chair-side dental assistants. In addition to the prescribed coursework, a minimum of 300 clinical hours is required to complete the program. Graduates of the certificate program are eligible to take the Dental Assisting National Board (DANB) Examination. Successful completion of the DANB Examination awards students the status of Certified Dental Assistant (CDA).

Program Learning Outcomes

Upon completion of the Dental Assisting certificate program, students should be able to:

- Assist a variety of procedures in the dental office in a professional manner (e.g. restorative, oral surgery, orthodontic, preventive, endodontic)
- Perform infection control procedures consistent with current industry standards
- Respond to medical emergency situations in the dental office (e.g., take and read vital signs, review health histories, prepare emergency drugs and equipment for use)
- Produce a variety of intra oral and extraoral radiographs of diagnostic quality
- Prepare various dental materials (e.g., cements, resins) for clinical and laboratory purposes

CIS 118	Introduction to PC Applications	3
DEA 102	Principles of Clinical Practice	3
DEA 104	Specialties in Dentistry	2
DEA 111	Dental Office Management	2
DEA 120	Introduction to Dental Practices	1
DEA 121	Dental Science I	3
DEA 122	Dental Science II	3
DEA 123	Dental Materials I	3
DEA 124	Dental Materials II	3
DEA 125	Dental Radiography	3
DEA 126	Infection Control	3
DEA 131	Advanced Dental Radiography	3
DEA 132	Medical Emergencies in the Dental Office	2
DEA 134	Prevention & Nutrition in Dentistry	3
DEA 140	Dental Assisting National Board Review	1
DEA 181	Clinical Internship I	1
DEA 182	Clinical Internship II & Seminar	6
ENG 121	English Composition I: CO1	3

Total Credit Hours **47-48**

Additional information available on the Dental Assisting Department website at www.pgcc.edu/dental-assisting.

Diesel Technology

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

This program prepares students for entry level positions in the field of heavy-duty diesel vehicle repair and parts supply. Areas of emphasis are engine repair, fuel supply and management, suspension and brakes, hydraulic systems operation, and lighting and instrumentation. The program provides students with a broad foundation in the diesel repair field employers are looking for.

Students entering this program should exhibit the following qualities: mechanical aptitude, ability to read and follow instructions as outlined in service repair manuals and enjoy precision work and problem solving. Students must provide appropriate work clothing, safety glasses, and a basic set of hand tools. Please meet with your advisor to get the required hand tool list.

Students not meeting a course prerequisite must have instructor permission to enroll.

Program Learning Outcomes

Upon completion of the Diesel Technology degree program, students should be able to:

- Interpret and use reference material found in the diesel industry
- Inspect and service selective catalytic reduction components and diesel particulate filters
- Interface with vehicle's on-board computer; perform diagnostic procedures using electronic service tool(s) (to include PC based software and/or data scan tools); determine needed action
- Read and interpret electrical/electronic circuits using wiring diagrams
- Use precision measuring tools as they apply to the diesel industry

General Education Courses

CIS 118	Introduction to PC Applications	3
COM 225	Organizational Communication	3
MAT 107	Career Math	3
Elective	AAS General Education Elective course	6

15

Additional Required Courses

DPM 100	Introduction to Diesel Mechanics	2
DPM 101	Diesel Shop Orientation	2
DPM 103	Diesel Engines I	4
DPM 105	Heavy Duty Powertrains I	3
DPM 106	Diesel Fuel Systems	3
DPM 120	Basic Heavy Duty Electricity	2
DPM 121	Hydraulic Systems I	3
DPM 122	Hydraulic Systems II	3
DPM 126	Heavy Duty Starting & Charging	3
DPM 140	Heavy Duty Steering & Suspension I	3
DPM 203	Diesel Engines II	4
DPM 205	Heavy Duty Powertrains II	3
DPM 206	Heavy Duty Brakes I	3
DPM 207	Heavy Duty Brakes II	3
DPM 208	Heavy Duty Automatic Trans Diagnosis	1
DPM 210	Diesel Air Induction & Exhaust	2

DPM 222	Heavy Duty Lighting & Instrumentation	3
DPM 223	Heavy Duty Body Electrical Systems	3
DPM 240	Heavy Duty Steering & Suspension II	3
DPM 264	Heavy Duty Heating & Ventilation	2
DPM 265	Heavy Duty Air Conditioning Systems Service	3
		<u>58</u>
Total Credit Hours		73

Certificates

Diesel Engine Performance

The Diesel Engine Performance Certificate is designed for students to learn to identify and describe different types of diesel-powered vehicles, as well as use information provided in maintenance manuals and parts manuals. Students acquire skills associated with maintaining a safe and clean working heavy duty diesel shop. Students learn the proper safe use and care for hand electric, air, and hydraulic tools. Additionally, students learn about the operation and repair of fuel injection systems, including disassembly, assembly, and service procedures of fuel system components. Students acquire skills in the operation and repair of turbochargers, superchargers, and various induction and exhaust systems, as well as procedures for reclaiming engine performance. Students also learn how to diagnose and repair the lighting systems found in medium/heavy duty trucks and equipment.

Program Learning Outcomes

Upon completion of the Diesel Engine Performance certificate program, students should be able to:

- Maintain a safe and clean working heavy duty diesel shop
- Conduct service procedures on fuel injection systems
- Determine service procedures for reclaiming engine performance
- Diagnose and repair lighting systems of medium and heavy-duty trucks

DPM 100	Introduction to Diesel Mechanics	2
DPM 101	Diesel Shop Orientation	2
DPM 106	Diesel Fuel Systems	3
DPM 210	Diesel Air Induction & Exhaust	2
DPM 222	Heavy Duty Lighting & Instrumentation	3
		<u>12</u>
Total Credit Hours		12

Diesel Engine Repair

The Diesel Engine Repair Certificate is designed for students to learn to identify and describe different types of diesel-powered vehicles, as well as use information provided in maintenance manuals and parts manuals. Students acquire skills associated with maintaining a safe and clean working heavy duty diesel shop. They also obtain skills in engine removal and reinstallation and remounting systems, with a particular focus on the operation and repair of diesel engines (disassemble, inspection, reassemble).

Program Learning Outcomes

Upon completion of the Diesel Engine Repair certificate program, students should be able to:

- Maintain a safe and clean working heavy duty diesel shop
- Diagnose and test diesel engines
- Assemble, inspect, and reassemble diesel engines (e.g. cinder blocks and big bore engines)

ASE 160	Automotive Engine Repair	2
DPM 100	Introduction to Diesel Mechanics	2
DPM 101	Diesel Shop Orientation	2
DPM 103	Diesel Engines I	4
DPM 203	Diesel Engines II	4
		<u>14</u>
Total Credit Hours		14

Diesel Fuel Injection

The Diesel Fuel Injection Certificate is designed for students to learn to identify and describe different types of diesel-powered vehicles, as well as use information provided in maintenance manuals and parts manuals. Students acquire skills associated with maintaining a safe and clean working heavy duty diesel shop. They also obtain skills in vehicle electricity, circuit designs, and wiring diagrams. Additionally, students learn about the operation and repair of fuel injection systems, including disassembly, assembly, and service procedures of fuel system components.

Program Learning Outcomes

Upon completion of the Diesel Fuel Injection certificate program, students should be able to:

- Maintain a safe and clean working heavy duty diesel shop
- Conduct service procedures of vehicle electricity and circuit systems
- Diagnose and repair fuel injection systems
- Conduct service procedures of fuel system components

ASE 120	Basic Automotive Electricity	2
DPM 100	Introduction to Diesel Mechanics	2
DPM 101	Diesel Shop Orientation	2
DPM 106	Diesel Fuel Systems	3
		<u>9</u>
Total Credit Hours		9

Preventative Maintenance

The Preventative Maintenance Certificate is designed for students to learn to identify and describe different types of diesel-powered vehicles, as well as use information provided in maintenance manuals and parts manuals. Students acquire skills associated with maintaining a safe and clean working heavy duty diesel shop. Additionally, students learn to perform preventative maintenance on heavy equipment and truck cab electrical systems, diesel engine systems, drivetrains and steering systems, equipment hydraulic and pneumatic brake systems. Students also learn how to complete maintenance records and understand the process of diagnostics and troubleshooting.

Program Learning Outcomes

Upon completion of the Preventative Maintenance certificate program, students should be able to:

- Maintain a safe and clean working heavy duty diesel shop
- Perform preventative maintenance on diesel powered vehicles (e.g., heavy equipment, truck cab, truck diesel engine systems, electrical systems, engine, drivetrains and steering systems, brakes)
- Complete maintenance records documentation

DPM 100	Introduction to Diesel Mechanics	2
DPM 101	Diesel Shop Orientation	2
DPM 111	Cab & Electrical PMI	1.5
DPM 112	Engine Systems PMI	1.5
DPM 211	Drivetrain, Steering & Suspension Preventive Maintenance	1.5
DPM 212	Brake System PMI	1.5
		<u>10</u>
Total Credit Hours		10

Additional information available on the Diesel Technology Department website at www.pgcc.edu/degrees-certificates/diesel-technology.

Dietary Management

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Algebraic Literacy

The Associate of Applied Science is the pathway for students interested in earning a degree with the Certified Dietary Manager certificate. This program provides related work experience as well as the basic career and technical knowledge required to manage non-commercial foodservice departments.

Program Learning Outcomes

Upon completion of the Dietary Management degree program, students should be able to:

- Manage the personnel, operations, and physical facilities of food service systems
- Apply standard nutrition care to meet the nutritional needs of clients
- Design, implement, monitor, and assess the effectiveness of nutrition care plans in coordination with the interdisciplinary team
- Apply safe food handling techniques in the food service department

General Education Courses

BIO 104	Biology: A Human Approach: SC1	4
CHE 101	Introduction to Chemistry I w/Lab: SC1	5
CIS 118	Introduction to PC Applications	3
COM 125	Interpersonal Communication	3
ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
HIS 247	20 th Century World History: HI1	3
MAT 121	College Algebra: MA1	4
PHI 111	Introduction to Philosophy: AH3	3
or		
PHI 112	Ethics: AH3	(3)
		31

Additional Required Courses

CUA 101	Food Safety & Sanitation	2
DIT 121	Nutrition for Dietary Managers	4
DIT 123	Management for Dietary Managers	4
DIT 180	Field Experience: Nutrition	1
DIT 181	Field Experience: Human Resources Management	2
DIT 182	Field Experience: Sanitation & Management of Food Systems	2
ECO 201	Principles of Macroeconomics: SS1	3
HWE 100	Human Nutrition	3
PSY 100	Psychology of Workplace Relationships	3
Electives	Choose two (2) credit hours from PED courses	2
	Choose three (3) credit hours from AH1, AH2, AH3, AH4 to exclude PHI	3
		29
Total Credit Hours		60

Certificate

Certified Dietary Manager Training Program

Offers education, training, and supervised experience to competently perform the responsibilities of a Certified Dietary Manager, Certified Food Protection Professional (CDM®, CFPP®) in healthcare and long-term care facilities, school districts and correctional institutions. Emphasizes the fundamentals of nutrition, foodservice, personnel and communications, sanitation and safety, and business operations in a foodservice department. Upon successful completion of the program individuals will be eligible to take the Certified Dietary Manager, Certified Food Protection Professional (CDM®, CFPP®) national examination from the Certifying Board of Dietary Managers (CBDM) and the Association of Nutrition and Foodservice Professionals (ANFP).

Program Learning Outcomes

Upon completion of the Certified Dietary Manager certificate program, students should be able to:

- Provide optimal nutrition services to patients or residents as a member of the nutrition care team
- Coordinate the service of food and nourishments among various departments such as dining and nursing
- Oversee food safety, inventory, and ordering of food, equipment, and supplies
- Arrange for the routine maintenance and upkeep of the foodservice equipment and facilities
- Coordinate all administrative and human resource functions of the foodservice department

CUA 101	Food Safety & Sanitation	2
DIT 121	Nutrition for Dietary Managers	4
DIT 123	Management for Dietary Managers	4
DIT 180	Field Experience: Nutrition	1
DIT 181	Field Experience: Human Resources Management	2
DIT 182	Field Experience: Sanitation & Management of Food Systems	2
HWE 100	Human Nutrition	3
		18

Additional information available on the Certified Dietary Manager Training Program Department website at www.pgcc.edu/certified-dietary-manager.

Early Childhood Education

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Early Childhood Education, like all education, demands well-prepared teachers. A growing body of research supports the value of high-quality early childhood programs for children's later success in school and in life, the most important determinant of which is the teacher.

Pikes Peak Community College and the Early Childhood Education program faculty are committed to providing the optimal course of study that meets the career goals of each student. The Early Childhood Education program is the foundation for a challenging and rewarding career in early childhood care and education as well as other related fields.

All students registered for ECE classes, both lecture-based and practicum-based courses, must submit to a criminal background check the first semester of enrollment. This process is completed online through the PPCC Human Resources Department, with an associated cost for the background check service. Further instructions are available on the ECE home page and will be provided the first day of class.

Upon completion of the Early Childhood Education program, students will be able to meet the educational qualifications for early childhood teacher and director as defined by the Colorado Department of Human Services for licensed childcare centers and preschools.

All students should schedule an appointment with an Early Childhood Education program advisor prior to enrolling in a class. Please call 719-502-3300 to schedule an appointment.

Program Learning Outcomes

Upon completion of the Early Childhood Education degree program, students should be able to:

- Apply their knowledge of child development and learning to their teaching practices
- Develop family and community relationships
- Observe, document, and assess young children to make informed decisions
- Apply developmentally effective approaches to connect with children and families
- Use content knowledge to build meaningful curriculum
- Define and demonstrate being an early childhood professional

General Education Courses

CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
COM 115	Public Speaking	3
or		
COM 125	Interpersonal Communication	(3)
ENG 121	English Composition I: CO1	3
MAT 112	Financial Mathematics	3
PSY 101	General Psychology I: SS3	3
or		
PSY 112	Psychology of Adjustment	(3)
or		
SOC 101	Introduction to Sociology I: SS3	(3)
or		
SOC 205	Sociology of Family Dynamics: SS3	(3)
		<u>15</u>

Additional Required Courses (all emphasis areas)

ECE 101	Introduction to Early Childhood Education	3
ECE 102	Introduction to Early Childhood Techniques	3
ECE 103	Guidance Strategies for Young Children	3
ECE 111	Infant & Toddler Theory & Practice	3
ECE 112	Introduction to Infant/Toddler Lab Techniques	3
ECE 191	School Age Theory & Practice	3
ECE 192	School Age Lab Techniques	3
ECE 205	Nutrition, Health & Safety	3
ECE 209	Observation & Assessment of Young Children's Development, Learning, & Programs	1
ECE 220	Curriculum Development: Methods & Techniques	3
ECE 226	Creativity & the Young Child	3
ECE 238	ECE Child Growth & Development	3
ECE 240	Administration of Early Childhood Care & Education Programs	3
ECE 241	Administration: Human Relations for Early Childhood Education	3

ECE 256	Working with Families & Communities	3
ECE 260	The Exceptional Child	3
ECE 261	Exceptional Child Lab Techniques	3
ECE 289	Capstone: Early Childhood Education	5
		<u>54</u>
Total Credit Hours		69

Certificates

Basic Skills

Patient and compassionate students will learn best practices for teaching children ages 3 through 8 in the classroom, how to cultivate the learning and imagination of youth as well as learning to handle medical emergencies.

Program Learning Outcomes

Upon completion of the Basic Skills certificate program, students should be able to:

- Implement and assess guidance and classroom management techniques
- Create a supportive, engaging, and inclusive classroom community
- Establish professional and ethical interactions with colleagues, children, and families
- Design and implement creative activities supporting self-expression and problem-solving skills in children

ECE 101	Introduction to Early Childhood Education	3
ECE 102	Introduction to Early Childhood Techniques	3
ECE 103	Guidance Strategies for Young Children	3
ECE 226	Creativity & the Young Child	3
HWE 103	Community First Aid & CPR	1
		<u>13</u>
Total Credit Hours		13

Director

Learn about the policies of preschool administration. Students will learn about the hiring process at Early Childhood institutions as well as learning and discussing learning theory and pedagogy with other PPCC students with similar goals.

Program Learning Outcomes

Upon completion of the Director certificate program, students should be able to:

- Establish professional and ethical interactions with colleagues, children, and families
- Implement responsive routines and environments to support the development of (typical and atypical) infants, toddlers, and children, including effective guidance and management techniques
- Observe and assess infant, toddler, and child development
- Create a supportive, engaging, and inclusive classroom community
- Design, implement, and evaluate developmentally and culturally appropriate learning experiences and environments
- Manage Early Childhood Education programs (e.g., ethical decision making, resource management)

ECE 101	Introduction to Early Childhood Education	3
ECE 102	Introduction to Early Childhood Techniques	3
ECE 103	Guidance Strategies for Young Children	3
ECE 111	Infant & Toddler Theory & Practice	3
ECE 205	Nutrition, Health & Safety	3
ECE 220	Curriculum Development: Methods & Techniques	3
ECE 238	ECE Child Growth & Development	3

ECE 240	Administration of Early Childhood Care & Education Programs	3
ECE 241	Administration: Human Relations for Early Childhood Education	3
ECE 260	The Exceptional Child	3
Total Credit Hours		30

ECT DHS Minimum Qualifications

After completing this certificate, students will meet the minimum qualifications for the DHS. This qualification is a requirement for employment at many early childhood institutions.

Program Learning Outcomes

Upon completion of the ECT DHS Minimum Qualifications certificate program, students should be able to:

- Observe and assess children's development
- Create a supportive, engaging, and inclusive classroom community
- Implement and assess guidance and classroom management techniques

ECE 101	Introduction to Early Childhood Education	3
or		
ECE 103	Guidance Strategies for Young Children	(3)
ECE	Elective Course of Choice	3
Total Credit Hours		6

Infant Toddler

Students learn how to care for infants and toddlers (birth to age three) with this certificate. With this certificate, students will be equipped for employment at daycares, preschools, Head Start programs, among other employment opportunities.

Program Learning Outcomes

Upon completion of the Infant Toddler certificate program, students should be able to:

- Observe and assess infant and toddler development
- Create learning environments promoting the health, nutrition, and safety of young children
- Implement responsive routines and environments to support the development of (typical and atypical) infants and toddlers, including effective guidance and nurturing techniques
- Establish professional, ethical, and inclusive interactions with colleagues, children, and families

ECE 111	Infant & Toddler Theory & Practice	3
ECE 112	Introduction to Infant/Toddler Lab Techniques	3
ECE 205	Nutrition, Health & Safety	3
ECE 238	ECE Child Growth & Development	3
ECE 256	Working with Families & Communities	3
ECE 260	The Exceptional Child	3
Total Credit Hours		18

Preschool

Students learn the necessary skills to seek employment at preschool programs in the state of Colorado.

Program Learning Outcomes

Upon completion of the Preschool certificate program, students should be able to:

- Establish professional, ethical, and inclusive interactions with colleagues, children, and families

- Implement responsive routines and environments to support children's development, including effective guidance and management techniques
- Observe and assess children's development
- Create a supportive, engaging, and inclusive classroom community
- Design, implement, and evaluate developmentally and culturally appropriate learning experiences

ECE 101	Introduction to Early Childhood Education	3
ECE 102	Introduction to Early Childhood Techniques	3
ECE 103	Guidance Strategies for Young Children	3
ECE 209	Observation & Assessment of Young Children's Development, Learning, & Programs	1
ECE 220	Curriculum Development: Methods & Techniques	3
ECE 238	ECE Child Growth & Development	3
ECE 256	Working with Families & Communities	3
ECE 260	The Exceptional Child	3
Total Credit Hours		22

Additional information available on the Early Childhood Education Department website at www.pgcc.edu/ece.

Emergency Medical Services

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Pikes Peak Community College offers a variety of courses in the Emergency Medical Services field. It is a Colorado Department of Health and Environment, Pre-hospital Care Division approved training center. It has the approval of the State Board for Community Colleges and Occupational Education. The programs are implemented with the cooperation of local medical societies and emergency medical agencies.

Program Learning Outcomes

Upon completion of the Emergency Medical Services (EMS) degree program, students should be able to:

- Perform relevant EMS psychomotor skills
- Interpret and apply EMS and general medical knowledge necessary to function in a healthcare setting
- Conduct oneself in an ethical and professional manner
- Effectively apply communication techniques in various situations

Emphasis Areas

Emergency Medical Technician

This program provides the Emergency Medical Technician the opportunity to complete the educational requirements for the AAS degree. This program offers education, training, and supervised clinical experiences to further prepare an EMT student to function in the pre-hospital setting such as urban/rural EMS, fire services, or contracted medical work with industrial, tactical, or expeditionary systems. Students will also be better equipped to apply for work with public and private healthcare institutions and correctional institutions under the scope of practice available to practitioners in Colorado.

General Education Requirements

COM 115	Public Speaking	3
ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
MAT 107	Career Math	3
PSY 101	General Psychology I: SS3	3
		<hr/>
		15

Additional Required Courses

BIO 111	General College Biology I w/Lab: SC1	5
BIO 201	Human Anatomy & Physiology I w/Lab: SC1	4
BIO 202	Human Anatomy & Physiology II w/Lab: SC1	4
EMS 121	EMT Fundamentals	3
EMS 122	EMT Medical Emergencies	4
EMS 123	EMT Trauma Emergencies	2
EMS 124	EMT Special Considerations	2
EMS 138	Basic EMS Simulation Lab	3
EMS 140	Advanced Simulation Lab	3
EMS 170	EMT Clinical	1
EMS 181	EMT Internship	1.5
HPR 101	Customer Service in Healthcare	2
HPR 102	CPR for Professionals	0.5
HPR 178	Medical Terminology	2
PSY 238	Child Development: SS3	3
PSY 249	Abnormal Psychology: SS3	3
		<hr/>
		45

Total Credit Hours 60

Paramedic

This program provides the Emergency Medical Technician at the Paramedic level with the opportunity to complete the educational requirements for the AAS Degree in Emergency Medical Services. Options are designed for the Paramedic level to allow students an opportunity to pursue a career compatible with their interest. Paramedic cohorts begin each Fall. A cohort is comprised of AAS and certificate-seeking students. The application process opens at the start of each Spring semester. Students are required to be Colorado-certified EMTs and have completed BIO 201 with a C or higher to apply. The application process includes the TEAS V for Allied Health exam.

General Education Requirements

BIO 201	Human Anatomy & Physiology I w/Lab: SC1	4
BIO 202	Human Anatomy & Physiology II w/Lab: SC1	4
ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
PSY 101	General Psychology I: SS3	3
		<hr/>
		17

Additional Required Courses

EMS 225	Fundamentals of Paramedic Practice	3
EMS 226	Fundamentals of Paramedic Practice Lab	2
EMS 227	Paramedic Special Considerations	3
EMS 228	Paramedic Special Considerations Lab	2
EMS 229	Paramedic Pharmacology	3
EMS 230	Paramedic Pharmacology Lab	2
EMS 231	Paramedic Cardiology	5
EMS 232	Paramedic Cardiology Lab	1
EMS 233	Paramedic Medical Emergencies	4
EMS 234	Paramedic Medical Emergencies Lab	1
EMS 235	Paramedic Trauma Emergencies	4
EMS 236	Paramedic Trauma Emergencies Lab	1
EMS 237	Paramedic Internship Preparation	2
EMS 280	Paramedic Internship I	6
EMS 281	Paramedic Internship II	6
		<hr/>
		45

Total Credit Hours 62

Certificates**Advanced Emergency Medical Technician**

The primary focus of the Advanced Emergency Medical Technician is to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system.

[From the: National EMS Scope of Practice Model]

Program Learning Outcomes

Upon completion of the Advanced Emergency Medical Technician certificate program, students should be able to:

- Perform patient assessments through physical examination and patient interviews of health history and current illness
- Formulate and carry out a patient treatment plan based on assessment information
- Provide basic and selected advanced emergency care and transportation for a patient with special needs
- Calculate, prepare, and administer medication doses

EMS 127	AEMT Special Considerations	2
EMS 129	AEMT Pharmacology	1
EMS 131	AEMT Fundamentals	2
EMS 132	EMS IV/IO Therapy	2
EMS 133	AEMT Medical Emergencies	2
EMS 135	AEMT Trauma Emergencies	2
EMS 171	AEMT Clinical Internship	2
		<hr/>
		14

Total Credit Hours

14

Emergency Medical Technician

The Emergency Medical Technician Certificate will prepare students to enter the field of Emergency Medical services as an EMT. EMTs work for ambulance companies, fire departments, and hospitals as paid or volunteer providers. Students will be able to demonstrate behaviors consistent with professional and employer expectations, technical proficiency in all the skills necessary to fulfill the role of an entry-level EMT, will be able to comprehend, apply, and evaluate information relative to the role of an entry-level EMT, will use sound judgment while functioning in the healthcare setting as an entry-level EMT, and will use critical thinking skills to assess and treat patients in emergency situations as an entry-level EMT.

Program Learning Outcomes

Upon completion of the Emergency Medical Technician certificate program, students should be able to:

- Perform a thorough physical examination on patients with medical and/or trauma complaints
- Respond to medical and trauma needs of patients, including special patient populations (e.g., pregnant patients, infants) and circumstances (e.g. mass casualty incidents, vehicle extrication)

EMS 121	EMT Fundamentals	3
EMS 122	EMT Medical Emergencies	4
EMS 123	EMT Trauma Emergencies	2
EMS 124	EMT Special Considerations	2
EMS 170	EMT Clinical	1

Total Credit Hours **12**

EMT Enhanced Curriculum

Offers education, training, and supervised clinical experience to further prepare an EMT student to function in the pre-hospital setting such as urban/rural EMS, fire services, or contracted medical work with industrial, tactical or expeditionary systems. Furthermore, students will be better equipped to apply for work with public and private healthcare institutions and correctional institutions. Emphasizes the enhanced EMT scope of practice available to practitioners in Colorado and elsewhere. Upon successful completion of the program individuals will obtain an Intravenous Therapy certification, Wilderness First Responder certification, and program completion certification for increased visibility during job applications.

Program co-requisites: EMS 121, EMS 122, EMS 123, EMS 124, and EMS 170 to begin

Program Learning Outcomes

Upon completion of the EMT Enhanced Curriculum certificate program, students should be able to:

- Interpret 3-lead electrocardiogram results
- Model therapeutic communication techniques in the field and simulated field environment
- Demonstrate successful peripheral intravenous (IV) access in the lab and clinical setting

EMS 138	Basic EMS Simulation Lab	3
EMS 140	Advanced Simulation Lab	3
HPR 190	Basic EKG Interpretation	2
HWE 129	Wilderness First Responder	4
Elective	Choose one elective from below	3

Total Credit Hours **17**

Electives

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
PSY 101	General Psychology I: SS3	3

Paramedic

This Paramedic certificate provides students with the skills needed to deliver emergency medical care to sick or injured patients in a safe and accurate manner. Student are introduced to the advanced practice of prehospital care, advanced emergency pharmacology, pharmacokinetics, and pharmacodynamics. Additionally, students learn about cardiovascular emergencies and the care of patients presenting with cardiovascular emergencies. Students learn how to integrate assessment findings when formulating a field impression and implementing a treatment plan in medical emergencies, trauma emergencies, and for acutely injured patients.

Program Learning Outcomes

Upon completion of the Paramedic certificate program, students should be able to:

- Perform a complete patient assessment
- Formulate and implement treatment plans for patients suffering from medical emergencies based on assessment findings
- Formulate and implement treatment plans for patients suffering from traumatic emergencies based on assessment findings
- Assess and treat special patient populations (e.g., newborns, elderly, patients with special needs)
- Serve as the Advanced Life Support team leader in a variety of emergency situations

BIO 201	Human Anatomy & Physiology I w/Lab: SC1 or	4
BIO 106	Basic Anatomy & Physiology	(4)
EMS 225	Fundamentals of Paramedic Practice	3
EMS 226	Fundamentals of Paramedic Practice Lab	2
EMS 227	Paramedic Special Considerations	3
EMS 228	Paramedic Special Considerations Lab	2
EMS 229	Paramedic Pharmacology	3
EMS 230	Paramedic Pharmacology Lab	2
EMS 231	Paramedic Cardiology	5
EMS 232	Paramedic Cardiology Lab	1
EMS 233	Paramedic Medical Emergencies	4
EMS 234	Paramedic Medical Emergencies Lab	1
EMS 235	Paramedic Trauma Emergencies	4
EMS 236	Paramedic Trauma Emergencies Lab	1
EMS 237	Paramedic Internship Preparation	2
EMS 280	Paramedic Internship I	6
EMS 281	Paramedic Internship II	6
Total Credit Hours		49

Additional information available on the Emergency Medical Services Department website at www.pccc.edu/emergency-medical-services.

Fire Science Technology

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

These programs are designed to allow an opportunity for experienced firefighters to receive awarded credits for knowledge gained through experience and training through the Fire Science Prior Learning Assessment Program.

A plan for the entry into and completion of the Fire Science Technology or Fire Service Management degrees should be discussed with the Fire Science faculty advisors. This advising is needed to provide thorough information on the requirements of the degree programs as well as to align the courses of the degrees with the students' academic and career goals.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

General Education Courses

CIS 118	Introduction to PC Applications	3	
or			
CSC 105	Computer Literacy	(3)	
ENG 121	English Composition I: CO1	3	
ENG 122	English Composition II: CO2	3	
MAT 107	Career Math or higher	3	
POS 111	American Government: SS1	3	
or			
PSY 100	Psychology of Workplace Relationships	(3)	
			<u>15</u>

Emphasis Areas**Fire Science Technology**

The Fire Science Technology degree is designed to prepare individuals who have little or no experience with the firefighting profession for entry-level positions in the fire service industry. The mission of the Fire Science Technology degree program is to provide students with the essential knowledge and skills required to succeed in the fields of fire protection, emergency management, firefighting, and wildland firefighting. Our goal is to equip students with the fundamental knowledge required to work effectively in entry-level positions in the fire service industry; to provide program curriculum, both instructive and practical, that encompasses basic firefighting knowledge and skills; and to incorporate the needs of area fire departments by providing advanced classes to enhance current firefighters' knowledge and skills.

Program Learning Outcomes

Upon completion of the Fire Science Technology degree program, students should be able to:

- Formulate basic fire ground strategies and tactics to be used during structure fire incidents
- Distinguish the different stages and types of fire behavior
- Compare the five building construction types and how they play a role during structural firefighting
- Analyze how and why the fire service incorporates safety and health measures
- Compare and contrast fire detection and suppression systems in various types of buildings

Additional Required Courses

EMP 101	Emergency Management	3	
FST 102	Principles/Emergency Services	3	
FST 103	Fire Behavior & Combustion	3	
FST 105	Building Construction for Fire Protection	3	
FST 106	Fire Prevention	3	
FST 109	Occupational Safety & Health for Fire	3	
FST 201	Instructional Methodology	3	
FST 202	Strategy & Tactics	3	
FST 203	Fire Hydraulics & Water Supply	3	
FST 209	Fire Protection Systems	3	
FST 259	Wildland Firefighting Strategy & Tactics	3	
Elective	Choose twelve (12) hours from technical electives	12	
			<u>45</u>

Total Credit Hours 60

Technical Electives

FST 100	Firefighter I	9	
FST 107	Hazardous Materials Operations (Level I)	3	
FST 110	Job Placement & Assessment	3	
FST 160	Candidate Physical Abilities Prep	3	
	Any other FST, FSW or PSM credits count for Technical Elective courses.		

Fire Service Management

The Fire Service Management degree is designed to prepare aspiring and experienced firefighters for future supervisory and leadership roles. The mission of the Fire Service Management degree program is to provide students with the essential knowledge and skills required to excel in supervisory and leadership roles of the fire service. Our goal is to provide foundational curriculum, both instructive and practical, that encompasses firefighting knowledge and skills; enhance students' leadership, management, and administrative abilities; and to provide current firefighters an opportunity to expand on their knowledge, in preparation for future supervisory roles.

Program Learning Outcomes

Upon completion of the Fire Service Management degree program, students should be able to:

- Assess the effectiveness of strategy and tactics on fire incidents
- Explain both management and administrative functions within the fire service
- Apply leadership abilities at the company level
- Analyze the cause and origin of fires
- Describe the principles of emergency management

Additional Required Courses

EMP 101	Emergency Management	3	
FST 109	Occupational Safety & Health for Fire	3	
FST 201	Instructional Methodology	3	
FST 205	Fire Investigation I	3	
FST 206	Fire Company Supervision & Leadership (Fire Officer I)	3	
FST 207	Firefighting Strategy & Tactics II	3	
FST 251	Legal Aspects of Fire Service	3	
FST 255	Fire Service Management	3	
FST 257	Fire Department Administration	3	
FST 258	Wildland Fire Incident Management & Operations	3	
FST 259	Wildland Firefighting Strategy & Tactics	3	
Elective	Choose twelve (12) hours from technical electives	12	
			<u>45</u>

Total Credit Hours 60

Technical Electives

FST 100	Firefighter I	9	
FST 107	Hazardous Materials Operations (Level I)	3	
FST 110	Job Placement & Assessment	3	
FST 160	Candidate Physical Abilities Prep	3	
	Any other FST, FSW or PSM credits count for Technical Elective courses.		

Certificate

Basic Firefighter

The Basic Firefighter program is designed to provide the student with basic firefighting skills and knowledge to help prepare one for an entry-level position in the fire service. The courses will provide skills and knowledge in hazardous materials, firefighting, and the emergency services as a whole.

Program Learning Outcomes

Upon completion of the Basic Firefighter certificate program, students should be able to:

- Discuss the various types of fires, prevention and extinguishment strategies, and personal protective equipment
- Analyze and respond to hazardous materials incidents
- Perform all critical physical tasks simulating actual job duties on the fireground
- Prepare for fire department entry level testing process to include oral board interview skills

FST 100	Firefighter I	9
FST 102	Principles/Emergency Services	3
FST 103	Fire Behavior & Combustion	3
FST 107	Hazardous Materials Operations (Level I)	3
FST 110	Job Placement & Assessment	3
FST 160	Candidate Physical Abilities Test Prep	3

Total Credit Hours **24**

Additional information available on the Fire Science Technology Department website at www.pccc.edu/fst.

Fire Science Wildland

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Wildland Firefighting is a firefighting, emergency management and natural resources interdisciplinary career and profession. This degree will allow the student to develop the competencies and skills to enter this expanding career field and will allow the seasoned wildland firefighter to enhance their experience with an academic program. This degree will prepare you to operate in multiple agency jurisdictions, apply standardized wildland firefighting principles as identified by the National Wildland Coordinating Group; introduce you to the principles of emergency management preparedness, mitigation, response, and recovery; and prepare you to attain a career and to enhance a career in wildland firefighting and related disciplines.

A plan for entry into and completion of the Fire Science Wildland degree should be discussed with one of the Fire Science Coordinators or Faculty. This advising is needed to provide thorough information on the degree requirements and to align the student's experience and certifications to the degree for credit for prior learning, if appropriate, and to advise on the student's academic and career goals.

Program Learning Outcomes

Upon completion of the Fire Science Wildland degree program, students should be able to:

- Apply standardized wildland firefighting principles as identified by the National Wildland Coordinating Group (NWCG)

- Describe how multi-agency operations are conducted during wildland fire incidents
- Demonstrate basic wildland fire behavior
- Explain the principles of emergency management
- Demonstrate proper strategy and tactics based on current and expected fire behavior

General Education Courses

CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
MAT 107	Career Math or higher	3
POS 111	American Government: SS1	3
	or	
PSY 100	Psychology of Workplace Relationships	(3)
		15

Additional Required Courses

EMP 101	Principles of Emergency Management	3
FST 103	Fire Behavior & Combustion	3
FST 109	Occupational Safety & Health for Fire	3
FST 202	Strategy & Tactics	3
FST 258	Wildland Fire Incident Management & Organization	3
FST 259	Wildland Firefighting Strategy & Tactics	3
FSW 153	S-290 Intermediate Wildland Fire Behavior	2
PSM 200	National Incident Management System/ Interagency Operations	3
Elective	Choose twenty-two (22) hours from technical electives	22
		45

Total Credit Hours **60**

Technical Electives

Any other FST or FSW credits count for Technical Electives courses.

Heating, Air Conditioning and Refrigeration Technology

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

This program prepares students to enter the heating, air conditioning and refrigeration field. This field of work involves different trade disciplines. The two-year program of core courses trains students in residential and commercial heating, ventilation, air conditioning, and refrigeration. The emphasis will be on the servicing and maintenance of equipment found in residences, commercial buildings, and large facilities.

The AAS degree should enhance students' initial entry placement and better prepare them for upward mobility within any of the three option areas.

All students should schedule advising appointments with the Heating, Air Conditioning and Refrigeration program advisor before enrolling in classes.

For success in this program the faculty recommends proficiency in math, reading and English.

Students may wish to attend summer classes to fulfill their general education course requirements, thereby reducing their fall and spring semester loads.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

Program Learning Outcomes

Upon completion of the Heating, Air Conditioning and Refrigeration Technology degree program, students should be able to:

- Identify problems in the operation of commercial and residential heating electro-mechanical systems
- Measure, calculate and interpret a wide range of commercial and residential refrigeration systems
- Follow safety policies and procedures related to the HVAC field
- Troubleshoot commercial and residential heating electro-mechanical systems
- Interpret, analyze, and evaluate the proper operation of commercial Air Conditioning roof top equipment

General Education Courses

CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
COM 125	Interpersonal Communication	3
ENG 131	Technical Writing I: CO1	3
MAT 107	Career Math	3
PSY 100	Psychology of Workplace Relationships	3
		<u>15</u>

Additional Required Courses

HVA 102	Basic Refrigeration	4
HVA 105	Electricity for HVAC/R	4
HVA 110	Fundamentals of Gas Heating	4
HVA 111	Piping Skills for HVAC	4
HVA 113	Refrigerant Recovery Training	1
HVA 118	Customer Soft Skills (Customer Services & Ethics)	2
HVA 132	Air Conditioning & Refrigeration Controls	4
HVA 142	Residential Air Conditioning	4
HVA 201	Heating for Commercial	3
HVA 204	Direct Digital Controls	4
HVA 206	Mechanical Code	4
HVA 233	Advanced Refrigeration	4
HVA 241	Advanced Air Conditioning	3
HVA 247	Hot Water Heating Systems	4
HVA 262	Residential Heat Pump Service	2
HVA 280	Internship	2
or		
HVA 141	Sheet Metal Fabrication	(2)
		<u>53</u>
Total Credit Hours		68

Certificates

Direct Digital Controls

Students completing the Direct Digital Controls certificate will gain skills necessary for entry level employment in the area of environmental controls as they pertain to the HVAC systems found in modern commercial and industrial buildings.

Students entering this certificate program will have demonstrated prior work experience of no less than four years or completion of an Associates of Applied Science Degree in HVAC or Facilities Maintenance Technology from an accredited college.

Program Learning Outcomes

Upon completion of the Direct Digital Controls certificate program, students should be able to:

- Install building automation devices
- Operate and modify an installed building automation system
- Set up and program a building automation system

ELT 101	Survey of Electronics	3
HVA 251	Building Automation I, Installer	4
HVA 252	Building Automation II, Service	4
HVA 253	Building Automation III, Advanced Operations	4
Total Credit Hours		15

Industry Upgrade

The Industry Upgrade certificate is designed for technicians currently employed in the HVAC&R field who want to upgrade their skills. The courses within this certificate option are constantly updated to include discussion of new technologies and equipment found in large modern facilities.

Program Learning Outcomes

Upon completion of the Industry Upgrade certificate program, students should be able to:

- Analyze air, temperature, and electrical measurements to service the operation of commercial Air Conditioning roof top equipment
- Evaluate water, steam, temperature, and flow to service the steam boiler
- Calculate temperatures and fluid flow for proper heat operation
- Evaluate the building control systems that are controlled by DDC (direct digital controls)

HVA 201	Heating for Commercial	3
HVA 204	Direct Digital Controls	4
HVA 233	Advanced Refrigeration	4
HVA 241	Advanced Air Conditioning	3
HVA 262	Residential Heat Pump Service	2
HVA 280	Internship	2
Total Credit Hours		18

Residential HVAC

The Residential HVAC certificate option provides a student with entry-level skills as a helper or apprentice in the installation, repair, and service of residential heating, ventilating, air conditioning, and refrigeration equipment found in today's residences.

Program Learning Outcomes

Upon completion of the Residential HVAC certificate program, students should be able to:

- Install, repair, and service residential heating, ventilating, air conditioning, and refrigeration (HVAC) equipment
- Determine proper equipment sizing based on heating and cooling load calculations
- Apply the Uniform Mechanical Code to HVAC equipment
- Assist clients through the entire repair process (e.g. customer service)

HVA 102	Basic Refrigeration	4
HVA 105	Electricity for HVAC/R	4
HVA 110	Fundamentals of Gas Heating	4
HVA 111	Piping Skills for HVAC	4
HVA 113	Refrigerant Recovery Training	1

HVA 118	Customer Soft Skills (Customer Services & Ethics)	2
HVA 132	Air Conditioning & Refrigeration Controls	4
HVA 142	Residential Air Conditioning	4
HVA 146	Residential Load Calculation & Duct Design	4
HVA 206	Mechanical Code	4

Total Credit Hours **35**

Additional information available on the Heating, Air Conditioning and Refrigeration Technology Department website at www.ppcc.edu/hvac.

Interior Design

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

As a PPCC interior design student you will have the opportunity to develop an understanding of the fundamentals of design, drafting, textiles, finish materials, graphic communication, space planning, residential design, commercial design and sustainability. Your studies will also include technical courses in AutoCAD and Revit software as well as courses that will prepare you for the industry. Your educational experience will include opportunities for hands-on experience and internships.

Program Learning Outcomes

Upon completion of the Interior Design degree program, students should be able to:

- Produce a comprehensive set of construction documents
- Produce presentation boards according to industry standards
- Create and present a project in front of a panel of industry experts
- Follow the complete design process, to include: Programming, Location/Demographic Research, Concept Development, Space Planning, Construction Documentation, and Specifications

General Education Courses

ART 110	Art Appreciation: AH1	3
or		
ART 121	Drawing I	(3)
COM 115	Public Speaking	3
or		
COM 125	Interpersonal Communications	(3)
CSC 105	Computer Literacy	3
or		
CIS 118	Introduction to PC Applications	(3)
ENG 121	English Composition I: CO1	3
or		
ENG 131	Technical Writing I: CO1	(3)
MAT 107	Career Math or higher	3
or		
Elective	AAS General Education Math course	(3)
		15

Additional Required Courses

CAD 105	AutoCAD for Interiors	4
CAD 215	Advanced CAD for Interiors	3
IND 100	Interior Design Fundamentals	4
IND 107	History of Interior Design	3
IND 111	Drafting for Interiors	4
IND 113	Perspective & Rendering Technique	3
IND 118	Interior Finishes	2

IND 120	Interior Design II: Space Planning & Human Factors	3
IND 151	Residential Design	4
IND 161	Introduction to Kitchen & Bath Design	3
IND 201	Commercial Design II	4
IND 205	Professional Practice for Interior Designers	2
IND 211	Interior Construction	4
IND 213	IND Portfolio Presentations	3
IND 220	Interior Design III: Materials, Details, Codes & Specs	3
IND 288	Practicum	1
IND 289	Capstone: Advanced Design	3
Elective	Choose seven (7) hours from the list below	7

60

Total Credit Hours **75**

Electives

AEC 218	Sustainable Building Systems	3
ART 150	Digital Art Foundations I	3
CAD 115	Sketchup	3
CAD 219	3DS Max	3
CAD 224	Revit Architecture	3
CAD 227	Advanced Revit Architecture	3
IND 152	Commercial Design I	2
IND 160	Accessorizing	3
IND 231	Sustainable Design	3
IND 278	Workshop: Design Portfolio	1
IND 280	Internship	3
IND 280	Internship	4
MGD 111	Adobe Photoshop I	3
MGD 112	Adobe Illustrator I	3

Additional information available on the Interior Design Department website at www.ppcc.edu/interior-design.

Machining Technology

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

There are two AAS degree emphasis in the Machining Technology program, Machining Technology Emphasis and Advanced Manufacturing Emphasis. These two-year programs are designed to provide individuals with entry level machining and technology skills, as well as addressing the needs of those seeking upgrade training for the purpose of continuing employment, employment upgrades, and/or promotions.

The Machining Technology emphasis degree will advance their hands-on fundamental skills of machining using MasterCAM 2D and 3D software, while developing applied math skills and problem-solving techniques.

The Advanced Manufacturing emphasis will provide training in technology using software such as SolidWorks, MasterCAM 2D and 3D, and CamWorks. The emphasis also offers courses in Geometric Dimensioning and Tolerance (GD &T) and 3D Printing for prototyping.

Students should schedule a meeting with the Machining Technology program advisor prior to enrolling in classes. During this meeting, student's goals and preparedness can be assessed.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

Students must meet with an advisor to select appropriate technical electives.

Program Learning Outcomes

Upon completion of the Machining degree program, students should be able to:

- Maintain a safe work area by demonstrating safety knowledge and proper use of hand tools and machining equipment
- Read and interpret industry prints, using current drawing standards in dimensioning, symbology, linetypes, lineweights, drawing notes for working drawings, engineering assembly and design related manufacturing drawings
- Demonstrate basic and advanced measurement processes and skills utilizing common measuring instruments to ensure projects are within given specifications
- Apply the principles and theory of manufacturing processes and basic operation manual machining operations using lathes, mills, drill presses and surface grinders
- Determine part function and relationship to each other, to include tolerancing of parts for assemblies while calculating mating part conditions to guarantee parts fits
- Create two-dimensional objects using computer-aided design/computer-aided manufacturing (CAD/CAM) software and processes for mills and machining tool paths
- Generate Numeric Control (NC) code using G-codes to machine parts to specifications
- Set up, program, and operate computerized numerical control (CNC) mills and machining centers in accordance with NIMS standards
- Create rapid prototypes using additive manufacturing to include identifying vendor parts to make a functional prototype

General Education Courses

CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
COM 225	Organizational Communication	3
ENG 131	Technical Writing I: CO1 or higher	3
MAT 107	Career Math or higher	3
	Three (3) additional credit hours from list below	3
		<u>15</u>

Select three (3) credit hours

BUS 115	Introduction to Business	3
COM 125	Interpersonal Communication	3
PSY 100	Psychology of Workplace Relationships	3

Emphasis Areas

Advanced Manufacturing

CAD 100	Print Reading for Computer Aided Drafting	3
	or	
MAC 102	Print Reading for Machinists	(3)
CAD 255	SolidWorks/Mechanical	3
CAD 259	Advanced SolidWorks	3
CAD 262	3D Printing/Additive Manufacturing	3
EGT 205	Geometric Dimension & Tolerance	3
MAC 100	Machine Shop Safety	1
MAC 101	Introduction to Machine Shop	3
MAC 110	Introduction to Engine Lathe	3
MAC 111	Intermediate Engine Lathe	3
MAC 120	Introduction to Milling Machine	3
MAC 121	Intermediate Mill Machine	3
MAC 205	Introduction to CNC Milling Operations	3
MAC 206	CNC Milling Operations II	3
MAC 240	CAD/CAM 2D	3

MAC 241	CAD/CAM 2D Lab	3
MAC 252	Practical Metallurgy	3
MTE 130	Metrology	3
		<u>49</u>

Total Credit Hours for Advanced Manufacturing Degree Emphasis 64

Machining Technology

MAC 100	Machine Shop Safety	1
MAC 101	Introduction to Machine Shop	3
MAC 102	Print Reading for Machinists	3
	or	
CAD 100	Print Reading for Computer Aided Drafting	(3)
MAC 110	Introduction to Engine Lathe	3
MAC 111	Intermediate Engine Lathe	3
MAC 112	Advanced Engine Lathe	3
MAC 120	Introduction to Milling Machine	3
MAC 121	Intermediate Mill Machine	3
MAC 122	Advanced Milling Machine Operations	3
MAC 205	Introduction to CNC Milling Operations	3
MAC 206	CNC Milling Operations II	3
MAC 240	CAD/CAM 2D	3
MAC 241	CAD/CAM 2D Lab	3
MAC 245	CAD/CAM 3D	3
MAC 246	CAD/CAM 3D Lab	3
MAC 252	Practical Metallurgy	3
MTE 130	Metrology	3
		<u>49</u>

Total Credit Hours for Machining Technology Degree Emphasis 64

Recommended Technical Elective

MAC 280	Internship	3
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Certificates

*Advanced Machining Technology

This Advanced Machining Technology certificate provides students with entry level machining skills. Students work on lab exercises covering robotic machinery, as well as a variety of three-dimensional lab exercises on robotic machinery. Students also learn about the behavior of metals and are exposed to practical metallurgy. This certificate is one of two certificates that build on each another.

Program Learning Outcomes

Upon completion of the Advanced Machining Technology certificate program, students should be able to:

- Maintain a safe work area by demonstrating safety knowledge and proper use of hand tools and machining equipment
- Read and interpret industry prints, using current drawing standards in dimensioning, symbology, linetypes, lineweights, drawing notes for working drawings, engineering assembly and design related manufacturing drawings
- Demonstrate basic and advanced measurement processes and skills utilizing common measuring instruments to ensure projects are within given specifications
- Apply the principles and theory of manufacturing processes and basic operation manual machining operations using lathes, mills, drill presses and surface grinders
- Determine part function and relationship to each other, to include tolerancing of parts for assemblies while calculating mating part conditions to guarantee parts fits

- Create two-dimensional objects using computer-aided design/computer-aided manufacturing (CAD/CAM) software and processes for mills and machining tool paths
- Generate Numeric Control (NC) code using G-codes to machine parts to specifications
- Set up, program, and operate computerized numerical control (CNC) mills and machining centers in accordance with NIMS standards
- Explain the changes in metallurgical characteristics during heating, cooling, shaping, and forming

MAC 112	Advanced Engine Lathe	3
MAC 122	Advanced Milling Machine Operations	3
MAC 240	CAD/CAM 2D	3
MAC 241	CAD/CAM 2D Lab	3
MAC 245	CAD/CAM 3D	3
MAC 246	CAD/CAM 3D Lab	3
MAC 252	Practical Metallurgy	3
Total Credit Hours		21

****Advanced Manufacturing Machining**

This Advanced Manufacturing Machining certificate provides students with entry level machining and technology skills. Students learn to use AutoCAD and are introduced to advanced applications of 3D parametric software, with the ability to blend the virtual and real design worlds together through the use of 3D CAD Modeling, and 3D Printing. Students also learn how to use common measuring instruments relating to state-of-the-art manufacturing environments. This certificate is one of four certificates that build on each other across three semesters.

Program Learning Outcomes

Upon completion of the Advanced Manufacturing Machining certificate program, students should be able to:

- Maintain a safe work area by demonstrating safety knowledge and proper use of hand tools and machining equipment
- Read and interpret industry prints, using current drawing standards in dimensioning, symbology, linetypes, lineweights, drawing notes for working drawings, engineering assembly and design related manufacturing drawings
- Demonstrate basic and advanced measurement processes and skills utilizing common measuring instruments to ensure projects are within given specifications
- Apply the principles and theory of manufacturing processes and basic operation manual machining operations using lathes, mills, drill presses and surface grinders
- Determine part function and relationship to each other, to include tolerancing of parts for assemblies while calculating mating part conditions to guarantee parts fits
- Create two-dimensional objects using computer-aided design/computer-aided manufacturing (CAD/CAM) software and processes for mills and machining tool paths
- Generate Numeric Control (NC) code using G-codes to machine parts to specifications
- Set up, program, and operate computerized numerical control (CNC) mills and machining centers in accordance with NIMS standards
- Apply geometric dimensioning and tolerancing (GDT) in machining/drafting
- Produce industrial 2D working drawings and 3D models using SolidWorks Software based on industry standards to create advanced models, parts, assemblies, and related documents (e.g., bill of materials, parts lists)

- Create rapid prototypes using additive manufacturing to include identifying vendor parts to make a functional prototype
- Explain the changes in metallurgical characteristics during heating, cooling, shaping, and forming

CAD 100	Print Reading for Computer Aided Drafting	3
or		
MAC 102	Print Reading for Machinists	(3)
CAD 255	SolidWorks/Mechanical	3
CAD 259	Advanced SolidWorks	3
CAD 262	3D Printing/Additive Manufacturing	3
EGT 205	Geometric Dimension & Tolerance	3
MAC 100	Machine Shop Safety	1
MAC 101	Introduction to Machine Shop	3
MAC 110	Introduction to Engine Lathe	3
MAC 120	Introduction to Milling Machine	3
MAC 205	Introduction to CNC Milling Operations	3
MAC 206	CNC Milling Operations II	3
MAC 240	CAD/CAM 2D	3
MAC 241	CAD/CAM 2D Lab	3
MAC 252	Practical Metallurgy	3
MTE 130	Metrology	3
Total Credit Hours		43

***Basic Machining Technology**

This Basic Machining Technology certificate provides students with entry level machining and technology skills. Students learn about the hazards of a machine shop including safety procedures, use of bench tools, layout tools, power saws, and various hand tools related to the machine shop. Students learn how to read and understand industrial prints, as well as basic drafting and print standards. This certificate is one of two certificates that build on each another.

Program Learning Outcomes

Upon completion of the Basic Machining Technology certificate program, students should be able to:

- Maintain a safe work area by demonstrating safety knowledge and proper use of hand tools and machining equipment
- Read and interpret industry prints, using current drawing standards in dimensioning, symbology, linetypes, lineweights, drawing notes for working drawings, engineering assembly and design related manufacturing drawings
- Demonstrate basic and advanced measurement processes and skills utilizing common measuring instruments to ensure projects are within given specifications
- Apply the principles and theory of manufacturing processes and basic operation manual machining operations using lathes, mills, drill presses and surface grinders
- Perform basic lathe operations (e.g., shaping, drilling, sanding, knurling, turning, cutting, and deformation)
- Operate a vertical milling machine (e.g., reaming, drilling, boring) within required tolerances

MAC 100	Machine Shop Safety	1
MAC 101	Introduction to Machine Shop	3
MAC 102	Print Reading for Machinists	3
or		
CAD 100	Print Reading for Computer Aided Drafting	(3)
MAC 110	Introduction to Engine Lathe	3
MAC 111	Intermediate Engine Lathe	3
MAC 120	Introduction to Milling Machine	3
MAC 121	Intermediate Mill Machine	3
Total Credit Hours		19

**Basic Manufacturing Machining

This Basic Manufacturing Machining certificate provides students with entry level machining and technology skills. Students learn about the hazards of a machine shop including safety procedures, use of bench tools, layout tools, power saws, and various hand tools related to the machine shop. Students also learn how to use common measuring instruments relating to state-of-the-art manufacturing environments. This certificate is one of four certificates that build on each other across three semesters.

Program Learning Outcomes

Upon completion of the Basic Manufacturing Machining certificate program, students should be able to:

- Maintain a safe work area by demonstrating safety knowledge and proper use of hand tools and machining equipment
- Read and interpret industry prints, using current drawing standards in dimensioning, symbology, linetypes, lineweights, drawing notes for working drawings, engineering assembly and design related manufacturing drawings
- Demonstrate basic and advanced measurement processes and skills utilizing common measuring instruments to ensure projects are within given specifications
- Produce industrial 2D working drawings and 3D models using SolidWorks Software based on industry standards to create advanced models, parts, assemblies, and related documents (e.g., bill of materials, parts lists)
- Explain the changes in metallurgical characteristics during heating, cooling, shaping, and forming

CAD 100	Print Reading for Computer Aided Drafting	3
or		
MAC 102	Print Reading for Machinists	(3)
CAD 255	SolidWorks/Mechanical	3
MAC 100	Machine Shop Safety	1
MAC 101	Introduction to Machine Shop	3
MAC 252	Practical Metallurgy	3
MTE 130	Metrology	3
Total Credit Hours		16

**CNC Machining

This CNC Machining certificate provides students with entry level machining and technology skills. Students learn how to construct, modify, and manage complex parts in 3D space as well as to produce 2D drawings from the 3D models, and create and edit CNC mill programs. Additionally, students learn how to interpret and apply geometric dimensioning and tolerancing (GDT) in machining or drafting. This certificate is one of four certificates that build on each other across three semesters.

Program Learning Outcomes

Upon completion of the CNC Machining certificate program, students should be able to:

- Determine part function and relationship to each other, to include tolerancing of parts for assemblies while calculating mating part conditions to guarantee parts fits
- Create two-dimensional objects using computer-aided design/computer-aided manufacturing (CAD/CAM) software and processes for mills and machining tool paths
- Generate Numeric Control (NC) code using G-codes to machine parts to specifications
- Set up, program, and operate computerized numerical control (CNC) mills and machining centers in accordance with NIMS standards

- Apply geometric dimensioning and tolerancing (GDT) in machining/drafting
- Produce industrial 2D working drawings and 3D models using SolidWorks Software based on industry standards to create advanced models, parts, assemblies, and related documents
- Create rapid prototypes using additive manufacturing to include identifying vendor parts to make a functional prototype

CAD 255	SolidWorks/Mechanical	3
CAD 259	Advanced SolidWorks	3
CAD 262	3D Printing/Additive Manufacturing	3
EGT 205	Geometric Dimension & Tolerance	3
MAC 205	Introduction to CNC Milling Operations	3
MAC 206	CNC Milling Operations II	3
MAC 240	CAD/CAM 2D	3
MAC 241	CAD/CAM 2D Lab	3
Total Credit Hours		24

**Intermediate Manufacturing Machining

This Intermediate Manufacturing Machining certificate provides students with entry level machining and technology skills. Students perform basic lathe operations and learn about 2-axis machining, 3-axis machining wire frame and surface modeling, lathe programming, DNC systems, and advanced applications of 3D parametric software. This certificate is one of four certificates that build on each other across three semesters.

Program Learning Outcomes

Upon completion of the Intermediate Manufacturing Machining certificate program, students should be able to:

- Perform basic lathe operations (e.g., shaping, drilling, sanding, knurling, turning, cutting, and deformation)
- Operate a vertical milling machine (e.g., reaming, drilling, boring) within required tolerances
- Create two-dimensional objects using computer-aided design/computer-aided manufacturing (CAD/CAM) software and processes for mills and machining tool paths
- Produce industrial 2D working drawings and 3D models using SolidWorks Software based on industry standards to create advanced models, parts, assemblies, and related documents (e.g., bill of materials, parts lists)

CAD 259	Advanced SolidWorks	3
MAC 110	Introduction to Engine Lathe	3
MAC 120	Introduction to Milling Machine	3
MAC 240	CAD/CAM 2D	3
MAC 241	CAD/CAM 2D Lab	3
Total Credit Hours		15

Machining for Welders

This Machining for Welders certificate provides students with entry level machining and technology skills. Students learn about the hazards of a machine shop including safety procedures, use of various tools related to the machine shop, and practical metallurgy. Additionally, students learn how to interpret weld symbols on blueprints, identify proper layout methods and tools, and proper joint design necessary for various welding processes.

Program Learning Outcomes

Upon completion of the Machining for Welders certificate program, students should be able to:

- Read and interpret welding blueprints using current drawing standards in dimensioning, symbology, linetypes, lineweights, drawing notes for working drawings, engineering assembly and design related manufacturing drawings (e.g., weld symbols, joint designs)

- Perform basic lathe operations (e.g., shaping, drilling, sanding, knurling, turning, cutting, and deformation)
- Operate a vertical milling machine (e.g., reaming, drilling, boring) within required tolerances
- Explain changes in metallurgical characteristics during heating, cooling, shaping, and forming

MAC 100	Machine Shop Safety	1
MAC 101	Introduction to Machine Shop	3
MAC 110	Introduction to Engine Lathe	3
MAC 120	Introduction to Milling Machine	3
MAC 252	Practical Metallurgy	3
WEL 106	Blueprint Reading for Welders & Fitters	4

Total Credit Hours **17**

*Note: These certificates build on one another. There is also the opportunity to receive more certifications should the student pass the exam NIMS Level One Certification.

**Note: The following certificates build on one another. After three semesters a student would achieve the four certificates below. There is also the opportunity to receive two more certifications should the student pass the exams: CSWA: Certification SolidWorks Associate National Certification and a NIMS Level One Certification.

Additional information available on the Machining Technology Department website at www.pgcc.edu/machining.

Medical Assistant

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

One Associate of Applied Science degree option and one certificate option are available. The areas of Medical/Clinical Assisting are designed to prepare individuals to assist with clinical and administrative functions as employees within the ambulatory health care setting. All students become familiar with multiple medical diagnostic and treatment procedures commonly performed in the ambulatory setting including phlebotomy, laboratory testing, respiratory testing and treatments, cast care, wound care, medication dosage calculation and administration, performing EKG (electrocardiogram) while interacting with patients and their needs.

Students not meeting a course prerequisite must have permission of coordinator to enroll. Students must have a grade of C or better in all classes to pass program/certification requirements.

Internship courses (MAP 183 and MAP 280) require additional considerations prior to enrollment, which include:

- Meeting with program coordinator in person the semester prior to internship for clearance;
- Proof of vaccines or blood titers for: tuberculin skin tests, proof of measles, rubella and rubeola, proof of hepatitis B, current year flu vaccination, chickenpox (Varicella), and a current tetanus;
- Obtaining a physical exam by their private physician at their own cost;
- PPCC approved criminal background checks and drug screening on all students;
- For specific disqualifiers on the background investigation, students should contact a MOT faculty advisor;

- Current CPR certification.

Failure to pass the criminal background or drug screen test will result in the inability to complete the desired certification or degree.

The criminal background check and drug screening process is completed online through the PPCC Human Resources Department, with associated cost for the background check and urine drug screening services. Further information is available on the program home page and will be provided upon advising with the program coordinator.

Students must be at least 18 years of age to qualify for the following courses within these programs: HPR 112, HPR 113, MAP 138, MAP 140, MAP 183 and MAP 280, or MOT 181 and MOT 182. See program advisor for details.

HPR 139 Medical Terminology must be completed in the students initial (first) term.

Program Learning Outcomes

Upon completion of the Medical Assistant degree program, students should be able to:

- Identify and describe body system structures and/or, disorders and/or diseases
- Discuss legal and/or ethical issues as applicable to medical practices
- Demonstrate effective communication skills
- Perform medical administrative and/or financial tasks
- Perform accepted clinical and/or laboratory skills for the ambulatory care setting
- To prepare competent entry level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains

Medical Assistant

This degree is designed to prepare individuals to work in both administrative and clinical areas of physician's office or outpatient medical clinic. Students successfully completing this degree program will be able to perform the administrative tasks of a medical receptionist and work in the clinical areas by providing assistance with physical examinations, diagnostic tests, and treatment procedures.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have permission of coordinator to enroll.

Program Prerequisite:

HPR 102 CPR for Professionals or current active CPR (cardiopulmonary resuscitation) certification from AHA (American Heart Association) approved training plan. Online CPR training certification is not accepted.

General Education Courses

CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
COM 115	Public Speaking	(3)
or		
COM 125	Interpersonal Communication	(3)
or		
COM 225	Organizational Communication	(3)
ENG 131	Technical Writing I: CO1	3
or		
ENG 121	English Composition I: CO1	(3)

MAT 107	Career Math	3	CIS 118	Introduction to PC Applications	3
or			or		
MAT 112	Financial Mathematics	(3)	CSC 105	Computer Literacy	(3)
PSY 100	Psychology of the Workplace	3	ENG 131	Technical Writing I: CO1	3
or			or		
PSY 101	General Psychology I: SS3	(3)	ENG 121	English Composition I: CO1	(3)
		<u>15</u>	or		

Additional Required Courses

HPR 106	Law & Ethics for Health Professionals	2	COM 115	Public Speaking	(3)
HPR 139	Medical Terminology	2	or		
HPR 208	Medical Record Terminology	2	COM 125	Interpersonal Communication	(3)
MAP 110	Medical Office Administration	4	or		
MAP 120	Medical Office Financial Management	4	COM 225	Organizational Communication	(3)
MAP 138	Medical Assisting Laboratory	4			
MAP 140	Medical Assisting Clinical Skills	4	Program Requirements		
MAP 150	Pharmacology for Medical Assistants	3	HPR 106	Law & Ethics for Health Professionals	2
MAP 183	Medical Assistant Internship	5	HPR 139	Medical Terminology	2
MAP 189	Review for Medical Assistant National Examination	1	HPR 208	Medical Record Terminology	2
MOT 124	Medical Filing	2	MAP 110	Medical Office Administration	4
MOT 125	Basic Medical Sciences I	3	MAP 120	Medical Office Financial Management	4
MOT 126	Introduction to Clinical Skills	3	MAP 138	Medical Assisting Laboratory	4
MOT 133	Basic Medical Sciences II	3	MAP 140	Medical Assisting Clinical Skills	4
MOT 135	Basic Medical Sciences III	3	MAP 150	Pharmacology for Medical Assistants	3
		<u>45</u>	MAP 189	Review for Medical Assistant National Examination	1
		60	MAP 280	Internship	4
			MOT 125	Basic Medical Sciences I	3
			MOT 126	Introduction to Clinical Skills	3
			MOT 133	Basic Medical Sciences II	3
			MOT 135	Basic Medical Sciences III	3
					<u>42</u>

Total Credit Hours**60****Certificate****Clinical Office Assistant**

This certificate is designed to prepare individuals to work in clinics or physicians' offices as clinical assistants. Successful graduates from this program will be able to provide physicians assistance with physical examinations, diagnostic tests, in-office laboratory testing and treatment procedures. All credits from this certificate may be applied to the Medical Assistant AAS degree program.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have permission of coordinator to enroll.

Program Learning Outcomes

Upon completion of the Clinical Office Assistant certificate program, students should be able to:

- Manage patient accounts and records (e.g., coding, billing, bookkeeping)
- Illustrate the normal functions and common pathologies of body systems (e.g., cardiovascular, respiratory, neurological)
- Interpret the use and side effects of drugs commonly used to treat diseases affecting body systems
- Perform administrative duties used in medical offices
- Perform examinations, treatments, and procedures associated with medical specialties
- Collect, handle, and examine laboratory specimens

Program Prerequisites:

HPR 102 CPR for Professionals or current active CPR (cardiopulmonary resuscitation) certification Heart Association) approved training plan. Online CPR training certification is not accepted.

Additional information available on the Medical Assistant Department website at www.pgcc.edu/medical-assistant.

Medical Office Technology**Certificates**

Medical Reception & Medical Coding certificate programs are designed to prepare individuals to assist with administrative functions as employees within the Medical or Clinical Office setting. All students become familiar with the health care system, medical terminology, and interpersonal relationships. Student will learn the administrative skills necessary for proper functioning of a medical office to include data entry into electronic medical records, HIPAA security, financial management, referrals, prior authorizations, coding for reimbursement.

Internship course (MAP 280) require additional considerations prior to enrollment, which include:

- Meeting with program coordinator in person the semester prior to internship for clearance;
- Proof of vaccines or blood titers for: tuberculin skin tests, proof of measles, rubella and rubeola, proof of hepatitis B, current year flu vaccination, chickenpox (Varicella), and a current tetanus;
- Obtaining a physical exam by their private physician at their own cost;
- Criminal background checks on all students;
- For specific disqualifiers on the background investigation, students should contact a MOT faculty advisor;
- Students who do not obtain the PCC approved criminal background investigation will not be able to enroll in internship class;
- Take and pass drug and alcohol screening prior to their internship;
- Current CPR certification.

Failure to pass the criminal background or drug screen test will result in the inability to complete the desired certification or degree.

The criminal background check and drug screening process is completed online through the PPCC Human Resources Department, with associated cost for the background check and urine drug screening services. Further information is available on the program home page and will be provided upon advising with the program coordinator.

Students must be at least 18 years of age to qualify for internship class (MAP 280) within this program. See program advisor for details.

Prepare competent entry-level Medical Assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains

Medical Coding Specialist

This certificate is designed to train students to code and bill physician services in the ambulatory care settings. This program prepares the student to take the National Accrediting exam with AHIMA &/or AAPC. Some credits from this Medical Coding Certificate program may be applied to the Medical Assistant AAS degree.

Program Learning Outcomes

Upon completion of the Medical Coding Specialist certificate program, students should be able to:

- Illustrate the normal functions and common pathologies of body systems (e.g., cardiovascular, respiratory, neurological)
- Interpret the use and side effects of drugs commonly used to treat diseases affecting body systems
- Analyze information from medical records and code it for insurance purposes

CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
HPR 106	Law & Ethics for Health Professionals	2
HPR 139	Medical Terminology	2
HPR 208	Medical Record Terminology	2
MOT 125	Basic Medical Sciences I	3
MOT 131	Advanced Insurance Billing & Coding	3
MOT 133	Basic Medical Sciences II	3
MOT 135	Basic Medical Sciences III	3
MOT 208	Introduction to CPT Coding	2
MOT 209	Introduction to ICD Coding	2
MOT 210	Intermediate Coding	3
Total Credit Hours		28

Medical Receptionist

This certificate is designed to prepare individuals to work as receptionists in the health care industry. Students successfully completing this course of study will be able to register new patients, use proper telephone techniques, schedule appointments, file medical records and process mail. Students will gain exposure to both computerized and manual systems to organize a medical office. Some credits from this program may be applied to the Medical Assistant AAS degree option.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have permission of coordinator to enroll.

Upon completion of the Medical Receptionist program, students will also qualify for the Medical Coding Specialist certification.

Program Prerequisites

HPR 102 CPR for Professionals or current active CPR (cardiopulmonary resuscitation) certification Heart Association) approved training plan. Online CPR training certification is not accepted.

Program Learning Outcomes

Upon completion of the Medical Receptionist certificate program, students should be able to:

- Illustrate the normal functions and common pathologies of body systems (e.g., cardiovascular, respiratory, neurological)
- Interpret the use and side effects of drugs commonly used to treat diseases affecting body systems
- Analyze information from medical records and code it for insurance purposes
- Manage patient accounts and records (e.g., coding, billing, bookkeeping)

CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
ENG 131	Technical Writing I: C01	3
or		
ENG 121	English Composition I: C01	(3)
or		
COM 115	Public Speaking	(3)
or		
COM 125	Interpersonal Communication	(3)
or		
COM 225	Organizational Communication	(3)

Program Requirements

HPR 106	Law & Ethics for Health Professionals	2
HPR 139	Medical Terminology	2
HPR 208	Medical Record Terminology	2
MAP 110	Medical Office Administration	4
MAP 120	Medical Office Financial Management	4
MAP 280	Internship	4
MOT 124	Medical Filing	2
MOT 125	Basic Medical Sciences I	3
MOT 126	Introduction to Clinical Skills	3
MOT 131	Advanced Insurance Billing & Coding	3
MOT 133	Basic Medical Sciences II	3
MOT 135	Basic Medical Sciences III	3
MOT 208	Introduction to CPT Coding	2
MOT 209	Introduction to ICD Coding	2
MOT 210	Intermediate Coding	3
Total Credit Hours		42

Additional information available on the Medical Office Technology Department website at www.ppcc.edu/degrees-certificates/Medical-Reception-and-Coding.

Multimedia Graphic Design

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

This program prepares the students for entry-level work in some of the following creative and exciting areas: graphic design, photo enhancement, digital illustration, interactive media digital video production, web design, animation, and production layout. Students receive a blend of knowledge in color, design, computer software, typography, and drawing. Students will also choose from a variety of course electives.

Maximizing student success in the Multimedia Graphic Design program is the department goal. The program faculty recommends that students develop the following desirable skill and knowledge foundations to enhance student success:

- Advanced college level study skills
- Working knowledge of algebraic principles and basic measurement
- College-level reading, writing, comprehension, and study skills
- Working knowledge and application of college-level English
- Demonstrated time management skills
- Keyboarding, mouse, and computer experience (will be taught in MGD 102). It is strongly recommended that students see an advisor for program planning.

Students may complete basic skill deficiencies concurrently with the beginning courses in the program. Students must arrange with advisors to remedy deficiencies in program requirements. Please call 719-502-3143 for advising.

Program Learning Outcomes

Upon completion of the Multimedia Graphic Design degree program, students should be able to:

- Discuss and implement design and industry skills using appropriate techniques
- Convey a message through a design medium based on client requirements, the target audience and using typographic principles to create an information hierarchy
- Produce a design that shows a mastery of technical knowledge in Typographic design principles
- Identify current trends and technologies as well as being well versed in a multitude of creative styles
- Critically analyze and interpret client requirements
- Assemble a strong portfolio and produce a professional level body of design work

General Education Courses

ART 110	Art Appreciation: AH1	3
or		
ART 207	Art History 1900to Present: AH1	(3)
COM 115	Public Speaking	3
or		
COM 217	Group Communication	(3)
ENG 121	English Composition I: CO1	3
or		
ENG 131	Technical Writing I: CO1	(3)

MAT 107	Career Math	3
or		
MAT 112	Financial Mathematics	(3)
Elective	AAS General Education Elective course	3
		<hr/> 15

Additional Required Courses

MGD 102	Introduction to Multimedia	3
MGD 103	Production Design	3
or		
MGD 117	Introduction to Visual Communications	(3)
MGD 109	Design & Color	3
or		
ART 230	Color Theory	(3)
MGD 111	Adobe Photoshop I	3
or		
ART 150	Digital Art Foundations I	(3)
MGD 112	Adobe Illustrator I	3
MGD 114	Adobe InDesign	3
MGD 116	Typography I	3
MGD 134	Drawing for Illustrators	3
MGD 141	Web Design I	3
MGD 143	Motion Graphic Design I	3
or		
MGD 165	After Effects I	(3)
MGD 213	Electronic Prepress	3
MGD 221	Computer Graphics I	3
MGD 241	Web Design II	3
or		
MGD 242	Web Architecture: Open Source Design	(3)
MGD 289	Capstone	3
Elective	Choose eight (8) hours from list below	8
		<hr/> 50

Total Credit Hours

65

Electives

ART 111	Art History Ancient to Medieval: AH1	3
ART 112	Art History Renaissance to 1900: AH1	3
COM 115	Public Speaking	3
or		
COM 217	Group Communication	(3)
JOU 105	Introduction to Mass Media: SS3	3
MGD 105	Typography & Layout	3
MGD 106	Creativity & Visual Thinking	3
MGD 107	History of Design	2
MGD 108	History of Illustration	2
MGD 110	Lettering for Graphic Design	2
MGD 117	Introduction to Visual Communications	3
MGD 132	Design & Color II	3
MGD 143	Motion Graphic Design I	3
MGD 153	3-D Animation I	3
MGD 156	Emergent Media Practices	3
MGD 164	Digital Video Editing I	3
MGD 165	After Effects I	3
MGD 178	Seminar/Workshop	3
MGD 180	Internship	3
MGD 201	Children's Book Illustration	3
or		
ART 122	Drawing for the Graphic Novel	(3)
MGD 202	Point of Purchase Packaging Design	3
MGD 207	Illustration I	3
or		
ART 121	Drawing I	(3)
MGD 208	Illustration II	3
or		
ART 221	Drawing II	(3)
MGD 209	Illustration III	3
MGD 210	Illustration IV	3

MGD 211	Adobe Photoshop II	3
MGD 212	Adobe Illustrator II	3
MGD 215	Painting for Illustrators	3
MGD 217	Typography II	3
MGD 222	Computer Graphics II	3
MGD 235	Word & Image 1: Comics	3
MGD 241	Web Design II	3
MGD 242	Web Architecture: Open Source Design	3
MGD 259	Management & Production	3
MGD 265	After Effects II	3
MGD 268	Business for Creatives	3
PHO 120	Fundamentals of Photography	3
or		
ART 139	Digital Photography I	(3)
PHO 205	Professional Digital Photo I	3
RTV 108	Principles of Audio	3
RTV 208	Basic Video Production	3
RTV 218	Advanced Video Production	3

Certificates

Design to Print

With the Design to Print Certificate students acquire a blend of knowledge regarding color, layout, and design associated with communication through print media. Students practice using design processes and creative problem solving in workups, finished art, and presentations. Additionally, students learn how to use the high-end capabilities of Adobe Photoshop, Adobe Illustrator, Adobe InDesign as illustration, design, and page layout tools. Students learn about typography and develop electronic drawing skills through practice and the use of state-of-the-art illustration software.

Program Learning Outcomes

Upon completion of the Design to Print certificate program, students should be able to:

- Create graphic communication using appropriate typography and layout
- Design and prepare digital files for printing
- Create marketing and branding collateral using advanced computer graphics
- Design a complex electronic graphics using state of the art graphics software

MGD 109	Design & Color	3
or		
ART 230	Color Theory	(3)
MGD 111	Adobe Photoshop I	3
or		
ART 150	Digital Art Foundations I	(3)
MGD 112	Adobe Illustrator I	3
MGD 114	Adobe InDesign	3
MGD 116	Typography I	3
MGD 213	Electronic Prepress	3
MGD 221	Computer Graphics I	3
MGD 222	Computer Graphics II	3
or		
MGD 211	Adobe Photoshop II	(3)
or		
MGD 212	Adobe Illustrator II	(3)
Total Credit Hours		24

Digital Image

With the Digital Image Certificate students acquire a blend of knowledge regarding color, layout, and design associated with communication through digital images. Students practice using design process and creative problem solving in workups, finished art, and presentations. Additionally, students learn how to use the high-end capabilities of Adobe Photoshop and Adobe Illustrator. Students explore visual problem solving using digital tools for fine art. Students are introduced to photography, camera equipment and software used for image capture, management, and manipulation. There is also an emphasis on the creative use of camera controls, exposure, and an overview of film and digital processing.

Program Learning Outcomes

Upon completion of the Digital Image certificate program, students should be able to:

- Create digital artwork for web design, print media, and digital screen design using Adobe Photoshop and Illustrator
- Apply image composition techniques using Adobe Photoshop
- Create a professional portfolio of photographic images

MGD 109	Design & Color	3
or		
ART 230	Color Theory	(3)
MGD 111	Adobe Photoshop I	3
or		
ART 150	Digital Art Foundations I	(3)
MGD 112	Adobe Illustrator I	3
MGD 211	Adobe Photoshop II	3
PHO 120	Fundamentals of Photography	3
or		
ART 139	Digital Photography I	(3)
Total Credit Hours		15

Foundations of Multimedia Graphic Design

With the Multimedia Graphic Design Certificate students acquire a blend of knowledge regarding the basic components of multimedia, including text, graphics, animation, sound, and video through the creation of an array of projects and demonstrations. Students practice using design process and creative problem solving, as well as learning about color theories, fundamentals, and styles. Additionally, students can learn how to use the high-end capabilities of Adobe Photoshop, Adobe Illustrator, Adobe InDesign as illustration, design, web design, and page layout tools.

Program Learning Outcomes

Upon completion of the Foundations of Multimedia Graphic Design certificate program, students should be able to:

- Create digital artwork for web design, print media, video, and digital screen design using the Adobe Creative Cloud

MGD 102	Introduction to Multimedia	3
MGD 109	Design & Color	3
MGD 111	Adobe Photoshop I	3
or		
ART 150	Digital Art Foundations I	(3)
MGD 112	Adobe Illustrator I	3
Elective	Choose three (3) credits from list below	3
Total Credit Hours		15

Electives

MGD 114	Adobe InDesign	3
MGD 116	Typography I	3
MGD 117	Introduction to Visual Communications	3
MGD 134	Drawing for Illustrators	3
MGD 141	Web Design I	3

Illustration

With the Illustration Certificate students acquire a blend of knowledge regarding color, layout, and design associated with communication through design illustration. Students learn how to use the high-end capabilities of Adobe Photoshop and Adobe Illustrator. Students acquire the fundamental skills associated with drawing and rendering line structure, form, value, and composition. Additionally, students learn about methods and techniques used in the profession of illustration for advertising, brochures, books, and other printed communication forms, with a focus on the development of color art for reproduction and proficiency in technique.

Program Learning Outcomes

Upon completion of the Illustration certificate program, students should be able to:

- Create illustrations using a variety of techniques (e.g., black-and-white, color)
- Present and critique illustrations in a professional manner
- Create comic layouts and panels
- Create professional level storyboards and wireframe

MGD 109	Design & Color	3
or		
ART 230	Color Theory	(3)
MGD 111	Adobe Photoshop I	3
or		
ART 150	Digital Art Foundations I	(3)
MGD 112	Adobe Illustrator I	3
MGD 134	Drawing for Illustrators	3
MGD 207	Illustration I	3
MGD 208	Illustration II	3
MGD 209	Illustration III	3
MGD 235	Word & Image 1: Comics	3
Total Credit Hours		24

Video Production and Editing

With the Video Production and Editing Certificate students acquire a blend of knowledge regarding color, layout, and design associated with communication through video. Students learn how to use Adobe Photoshop and how to create animation and dynamic interactive media for web and multimedia applications to a professional standard as well as the use of digital non-linear video editing and techniques for creating digital motion graphics. Additionally, students will learn basic audio production and editing techniques used in television and videotape production.

Program Learning Outcomes

Upon completion of the Video Production and Editing certificate program, students should be able to:

- Create digital motion graphics such as 2D and 3D animations, animated logos, and video graphics
- Develop, edit, and produce digital video assets for multimedia
- Produce audio tracks for online and multimedia productions
- Create effect professional level content with comprehensive knowledge of the principles of animation

MGD 109	Design & Color	3
or		
ART 230	Color Theory	(3)
MGD 111	Adobe Photoshop I	3
or		
ART 150	Digital Art Foundations I	(3)
MGD 143	Motion Graphic Design I: Software	3
MGD 164	Digital Video Editing I	3
MGD 165	After Effects I	3
RTV 108	Principles of Audio	3
RTV 208	Basic Video Production	3
Total Credit Hours		21

Web Design

With the Web Design Certificate students acquire a blend of knowledge regarding color, layout, and design associated with communication through web sites. Students learn how to use Adobe Photoshop and how to create animation and dynamic interactive media for web and multimedia applications to a professional standard. Additionally, students learn about web site planning, design, and creation through industry-standard development tools as well as open sources tools used in the design industry for designing and implementing web architecture.

Program Learning Outcomes

Upon completion of the Web Design certificate program, students should be able to:

- Create digital graphics for web design, print media, and digital screen design using Adobe Creative Cloud
- Design complex web sites using HTML and CSS along with industry-standard development tools
- Create animation and dynamic interactive media for web and multimedia applications
- Design and implement effective User Experience (UX)

MGD 109	Design & Color	3
or		
ART 230	Color Theory	(3)
MGD 111	Adobe Photoshop I	3
or		
ART 150	Digital Art Foundations I	(3)
MGD 112	Adobe Illustrator I	3
MGD 141	Web Design I	3
MGD 143	Motion Graphic Design I	3
MGD 241	Web Design II	3
MGD 242	Web Architecture: Open Source Design	3
Total Credit Hours		21

Additional information available on the Multimedia Graphic Design Department website at www.pcc.edu/degrees-certificates/multimedia-graphic-design.

Nursing

Pikes Peak Community College offers the following programs:

- Registered Nurse Associate of Applied Science Degree
- Registered Nurse Associate of Applied Science Degree with PN Exit Option
- Registered Nurse Associate of Applied Science Degree for Advanced Placement (LPN-RN)
- Nursing Assistant Certificate

Admission to the college does not assure admission to the registered nursing programs. Admission to the RN program with the LPN exit option and the Advanced Placement option require separate admission criteria. All students interested in the registered nursing programs who do not have previous college courses must complete the PPCC placement exams prior to being advised. Potential students should attend Information Nights held each month to obtain information prior to advising. Interested students can inquire on times by calling 719-502-3400 or 719-502-3450. Students should complete the application to the PPCC nursing program by picking up a copy of the application from the Medical Sciences division or downloading a copy from the PPCC nursing website at www.ppcc.edu/degrees-certificates/nursing/.

This should be performed when all prerequisites are completed with a minimum GPA of 2.5 with a minimum grade of C in each course. Students interested in the Nursing Assistant Certificate should apply directly to the college and then sign up for appropriate classes. All students will be required to meet regulations regarding CPR, immunizations, and disability issues. It is the policy of the PPCC Program of Nursing to provide reasonable accommodation to qualified students with disabilities. Whether or not a requested accommodation is reasonable will be determined on an individual basis. Determining what is a reasonable accommodation is an interactive process which the students should initiate with Accessibility Services.

Program Learning Outcomes

Upon completion of the Nursing degree program, students should be able to:

- Provide safe quality evidenced-based patient centered (holistic) and compassionate care in a variety of health care settings
- Demonstrate critical thinking when analyzing patient data and considering quality improvement in healthcare delivery systems
- Participate in collaborative relationships with members of the interdisciplinary team for the purpose of providing and improving patient care outcomes
- Provide teaching to diverse patient populations across the lifespan incorporating the health-illness continuum
- Provide and direct nursing care that coordinates, organizes, prioritizes, and modifies care using the nursing process in a variety of health care settings
- Function as a competent nurse assimilating all professional, ethical, and legal principles related to nursing practice
- Utilize a variety of types of information technology and communication skills to communicate, manage knowledge, mitigate error, and support decision making
- Provide leadership in a variety of healthcare settings for diverse patient populations

Nursing: Registered Nurse

Associate of Applied Science Degree with Licensed Practical Nurse Exit Option

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

The Registered Nursing program is an Associate of Applied Science degree. Nursing courses begin in either the fall or spring semester. The PPCC Nursing program is designed to be completed in 4 semesters. Admission criteria for the state community college nursing programs are standardized. They are subject to change. PPCC nursing program maintains a competitive admission process. Students must complete the Nursing program application after completing all prerequisites. An application can be obtained by downloading a copy from the PPCC nursing website at www.ppcc.edu/degrees-certificates/nursing/.

Prerequisite Courses

BIO 201	Human Anatomy & Physiology I w/Lab: SC1	4
BIO 204	Microbiology w/Lab: SC1	4
ENG 121	English Composition I: CO1	3
PSY 235	Human Growth & Development: SS3	3
Total Prerequisite Credits		14

- All Biology (BIO) prerequisites must be completed within seven (7) years of entry into CCCS nursing programs.
- All courses must have a minimum of C grade with an overall GPA of 2.5 in the prerequisites.
- Students will be asked to complete a Nurse Entrance Test (Tests of Essential Academic Skills, TEAS) at time of application. Please see the nursing application for more information.
- Upon provisional acceptance, the program will notify the student of dates needed to obtain additional information such as:
 - Criminal background check/drug testing
 - Immunizations
 - CPR for Health Care Provider (BLS), American Heart Association (AHA) only
 - CNA requirement: either an Active Colorado CNA certificate in good standing OR successful completion of NUA 101, NUA 170 and NUA 171 courses within the CCCS system.

Nursing Curriculum

Year I First Semester

BIO 202	Human Anatomy & Physiology II w/Lab: SC1	4
MAT 103	Math for Clinical Calculations	3
NUR 109	Fundamentals of Nursing	6
NUR 112	Basics Concepts of Pharmacology	2

Year I Second Semester

BIO 216	Human Pathophysiology	4
NUR 106	Medical & Surgical Nursing Concepts	7
NUR 150	Maternal-Child Nursing	6

Year II First Semester

NUR 206	Advanced Concepts of Medical-Surgical Nursing I	6.5
NUR 211	Psychiatric-Mental Health Nursing	4
NUR 212	Pharmacology II	2

Year II Second Semester

NUR 216	Advanced Concepts of Medical-Surgical Nursing II	5
NUR 230	Transition to Professional Nursing Practice	4
Arts and Humanities or Social and Behavioral Sciences GT	Pathways elective	3
Total Nursing Credits		56.5
Total Credits		70.5

Students are eligible to apply to take the NCLEX-PN at the successful completion of the first year of nursing courses and NUR 169 Transition into Practical Nursing (minimum of C grade). Students are eligible to apply to take the NCLEX-RN at the successful completion of the second year of nursing courses. Students may also complete any of the other general education/science courses prior to entry in nursing courses.

Nursing: LPN Advanced Placement Option**Associate of Applied Science Degree**

Recommended basic skills courses are

- Basic Computer Literacy
- College Reading & Writing Literacy
- College Quantitative Literacy

Pikes Peak Community College offers an advanced placement associate degree program for licensed practical nurses. Prior LPN course work from an accredited practical/vocational nursing program within the USA and a Colorado LPN license in good standing may be accepted.

Admission criteria for the state community college nursing programs are standardized and subject to change. PPCC nursing program maintains a competitive admission process. Students should complete the LPN to RN nursing program application to the PPCC nursing program after completing all prerequisites by downloading a copy from the PPCC nursing website at www.ppcc.edu/degrees-certificates/nursing/. Students must pass background check, drug screening, and complete immunizations prior to admission. Students must also complete entrance exam with minimum score.

Prerequisite Courses

Must be completed with a minimum GPA of 2.5

BIO 201	Human Anatomy & Physiology I w/Lab: SC1	4
BIO 202	Human Anatomy & Physiology II w/Lab: SC1	4
BIO 204	Microbiology w/Lab: SC1	4
ENG 121	English Composition I: CO1	3
PSY 235	Human Growth & Development: SS3	3
Total Prerequisite Credits		18

Must be completed prior to entry with a minimum grade of C

BIO 216	Human Pathophysiology	4
MAT 103	Math for Clinical Calculations	3
NUR 189	Transition from LPN to ADN (Taken only after acceptance)	4

Other requirements are the same as the Registered Nurse Associate of Applied Science Degree with the Practical Nurse Exit Option. Details on the nursing programs can be found on the PPCC website under nursing.

Nursing Curriculum**Year II First Semester**

NUR 206	Advanced Concepts of Medical-Surgical Nursing I	6.5
NUR 211	Psychiatric-Mental Health Nursing	4
NUR 212	Pharmacology II	2

Year II Second Semester

NUR 216	Advanced Concepts of Medical-Surgical Nursing II	5
NUR 230	Transition to Professional Nursing Practice	4
Arts and Humanities or Social and Behavioral Sciences	gtPathways elective	3
Total Nursing Credits		35.5
Total Credits including Prerequisites		53.5
With NUR transfer credits from prior LPN coursework		17
Total Credits		70.5

Certificate**Nursing Assistant**

This certificate is designed to prepare individuals for entry level positions in bedside care. The program is competency-based introducing students to the principles, skills and abilities that comprise the Nursing Assistant Scope of Practice. Successful graduates of this program will have the knowledge base to work in a variety of settings to include long-term care, home health, hospice, rehabilitation, and acute care. Students who complete NUA 101, NUA 170 and NUA 171 are eligible for a Program Completion Certificate from Pikes Peak Community College.

A PPCC Program Certificate does not guarantee state licensure or the ability to legally practice as a Certified Nursing Assistant. The PPCC Program Certificate grants the individual eligibility to apply to take the Colorado Nurse Aide Certificate Examination. It is successful completion of the state certification exam within two years of program completion that will result in legal licensure and the eligibility for practice within the State of Colorado.

In addition to the classroom content delivered in NUA 101, students can anticipate up to 60 hours of hands-on clinical experience in NUA 170 and 171. Clinical instruction takes place outside of the traditional classroom in a live, community-based healthcare setting. Students must be at least 16 years of age to participate in NUA 170 and 171 (18 years of age to participate in NUA 174) and have completed the following:

- NUA 101 with a cumulative grade of 74% or better
- Attended an NUA Information Session or reviewed the information session power point on the NUA website <https://www.ppcc.edu/nursing/nursing-assistant>.
- Proof of immunization or blood titers for: Tetanus, Diphtheria & Pertussis (TDAP), Measles, Mumps, Rubella (MMR), Hepatitis B and Varicella. Tuberculin skin test, quantiferon or negative Chest X-ray and current year influenza vaccination.
- Obtain a physical exam administered by their private care physician at their own cost.
- Current CPR for Healthcare Providers or BLS
- PPCC approved criminal background check and drug screen: The background checks and drug screens are an additional cost, paid by the student. Failure of either the background check or drug screen will disqualify the individual for eligibility to the program for two years. Contact an NUA faculty advisor for information on specific disqualifiers.

Program Learning Outcomes

Upon completion of the Nursing Assistant certificate program, students should be able to:

- Implement awareness of a client's emotional, social, and mental health needs through skillful, directed interactions
- Support the client in attaining and maintaining independence

- Interpret the observational and documentation skills needed in the assessment of client’s health, physical condition, and well-being
- Demonstrate the functions of the nursing assistant within the health care team
- Communicate competently with clients and other members of the healthcare team
- Exhibit behavior in support and promotion of the Clients' rights
- Demonstrate an awareness of the Colorado Nurse Aide Practice Act

Required Courses

NUA 101	Nurse Aide Health Care Skills	4
NUA 170	Nurse Assistant Clinical Experience	1
NUA 171	Advanced Nurse Aide Clinical	1
Total Credit Hours		6

Other courses for nursing assistants

NUA 105	Home Health Aide Theory	2
NUA 174	Acute Care Nurse Aid Skills	1

Additional information available on the Nursing Assistant Department website at www.pgcc.edu/nursing-assistant.

Outdoor Leadership & Recreation Technology

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Are you interested in exploring your passion, developing your outdoor skills, gaining leadership experience, or finding employment doing what you love? The world of careers is open to students pursuing an Outdoor Leadership and Recreation Technology degree. From guiding mountaineering trips in the Colorado Rockies to teaching environmental education courses to presenting wildlife programs at local nature centers, this program provides background education in a wide scope of industry career paths.

This two-year AAS degree includes a variety of certification classes, hands-on learning opportunities and a diverse elective list allowing students to enhance outdoor skills in their specific area of interest. Training emphases include outdoor leadership, field studies, group dynamics, risk management, web design, wilderness skills, and low-impact techniques for environmental stewardship. To enhance the learning process, students will utilize their education by applying skills developed within the program to an internship of their choosing.

Students may complete academic deficiencies concurrently with the beginning courses in the program. Students must arrange with advisors to remedy deficiencies in program requirements. Students not meeting a course prerequisite must have instructor permission to enroll.

Program Learning Outcomes

Upon completion of the Outdoor Leadership and Recreation Technology degree program, students should be able to:

- Exhibit mastery of outdoor leadership and recreational technical skills

- Exhibit competent and ethical leadership in an outdoor environment
- Communicate effectively and professionally with clients and other community members
- Assess potential environmental impacts of recreation activity
- Discuss, explain, and implement relevant environmental conservation practices

General Education Courses

BIO 103	Animal Biology	3
COM 115	Public Speaking	3
ENG 131	Technical Writing I: CO1	3
or		
ENG 121	English Composition I: CO1	(3)
ENV 101	Environmental Science w/Lab: SC1	4
MAT 107	Career Math	3
		16

Additional Required Courses

HWE 103	Community First Aid & CPR	1
NRE 236	Public Relations of Natural Resources	2
OUT 108	Wilderness Survival Skills	3
OUT 134	Wilderness Ethics	2
OUT 135	Risk Management for Outdoor Professionals	1
OUT 143	Backpacking	2
OUT 187	Cooperative Education Internship	3
OUT 211	Mountaineering Leadership	4
OUT 289	Capstone	4
REC 100	Introduction to Recreation	2
REC 211	Outdoor Leadership	2
REC 212	Outdoor Recreation Programming	3
Elective	Choose eighteen (18) hours from the list below	18
		46

Total Credit Hours

62

Electives

BIO 111	General College Biology I with Lab: SC1	5
BIO 221	Botany with Lab: SC1	5
BUS 115	Introduction to Business	3
CUA 101	Food Safety & Sanitation	2
CWB 110	Introduction to Web Authoring	3
ECO 245	Environmental Economics: SS1	3
EMS 115	Emergency Medical Responder	3
GEO 111	Physical Geography: Landforms with Lab: SC1	3
GEO 112	Physical Geography: Weather, Climate & Ecosystems w/Lab: SC1	4
GEY 108	Geology of U.S. National Parks: SC2	3
GEY 111	Physical Geology w/Lab: SC1	4
HIS 121	U.S. History to Reconstruction: HI1	3
HIS 207	American Environmental History: HI1	3
HIS 225	Colorado History: HI1	3
HWE 129	Wilderness First Responder	4
MAN 216	Small Business Management	3
MGD 102	Introduction to Multimedia	3
OUT 102	Backcountry Navigation	1
OUT 108	Wilderness Survival Skills	3
OUT 109	Winter Wilderness Survival Skills	2
OUT 129	Ice Climbing I	1
OUT 131	Rock Climbing I	2
OUT 132	Rock Climbing II	2
OUT 144	Backcountry Cooking	1
OUT 156	Survival Plants in the Summer I	2
OUT 167	Basic Search & Rescue	3
OUT 168	Avalanche Awareness Level I	1
OUT 169	Avalanche Awareness Level II	2
OUT 201	Scuba Diving	1
OUT 202	Open Water Diver	1
OUT 211	Mountaineering Leadership	4
ZOO 117	Biodiversity & Conservation	3

Certificates

Mountain Field Studies

This Mountain Field Studies certificate is designed to prepare students to work in a variety of outdoor settings. Students will acquire skills in emergency medical care techniques useful in backcountry settings that enable them to respond correctly to medical and trauma situations, as well as basic search and rescue techniques. Students will learn wilderness survival skills, backpacking skills, safety procedures, geography, and group dynamics in mountain environments. Additionally, students will learn the principles of rock climbing, including basic climbing skills, lead climbing, and climbing ethics and safety. Ultimately students will develop the ability and leadership skills to safely lead a group on mountaineering experience.

Program Learning Outcomes

Upon completion of the Mountain Field Studies certificate program, students should be able to:

- Instruct and lead groups on mountaineering experiences (e.g., camping, backpacking)
- Utilize appropriate techniques and equipment for various wilderness rescues
- Employ a variety of climbing techniques and equipment
- Respond to medical and trauma situations
- Employ wilderness survival techniques

HWE 129	Wilderness First Responder	4
OUT 108	Wilderness Survival Skills	3
OUT 112	Mountain Orientation	2
OUT 131	Rock Climbing I	2
OUT 132	Rock Climbing II	2
OUT 136	Leave No Trace Trainer Cert.	2
OUT 167	Basic Search & Rescue	3
OUT 211	Mountaineering Leadership	4
Total Credit Hours		22

Outdoor Entrepreneur Professional Business

This Outdoor Entrepreneur Professional Business certificate is designed to prepare students to work in a variety of outdoor settings, with a focus on aspects related outdoor businesses. Students will learn the fundamentals of accounting, the development of a business plan, and the operation of businesses, including their management, regulation, and social responsibilities. Additionally, students will learn about the inherent risks associated with various outdoor activities and will create a risk management plan specific to their area of interest. Students will also learn how to effectively plan, staff, and budget for outdoor recreational programming.

Program Learning Outcomes

Upon completion of the Outdoor Entrepreneur Professional Business certificate program, students should be able to:

- Develop a risk management plan for an outdoor business
- Plan, construct, and maintain both high and low challenge course elements
- Write a comprehensive business plan for an outdoor business (e.g., marketing, budgeting, staffing)

ACC 101	Fundamentals of Accounting	3
BUS 115	Introduction to Business	3
CSC 105	Computer Literacy	3
MAN 216	Small Business Management	3
OUT 135	Risk Management for Outdoor Professionals	1
OUT 136	Leave No Trace Trainer Cert.	2

OUT 216	Challenge Course Facilitation	2
REC 212	Outdoor Recreation Programming	3
Total Credit Hours		20

Water Recreation Studies

This Water Recreation Studies certificate is designed to prepare students to work in a variety of outdoor settings. Students will acquire skills in emergency medical care techniques useful in backcountry settings that enable them to respond correctly to medical and trauma situations. Students will acquire skills in emergency medical care techniques useful in backcountry settings that enable them to respond correctly to medical and trauma situations, as well as water/river rescue techniques, and basic instruction in scuba diving. Additionally, students will acquire some advanced skills associated with whitewater boat handling, water reading skills, flyfishing, kayaking, rafting, river trip planning, camp management, backcountry cooking, and hazard evaluation. The focus will be on approaching recreation topics from the professional river-guide's perspective.

Program Learning Outcomes

Upon completion of the Water Recreation Studies certificate program, students should be able to:

- Instruct and lead groups in recreational water/river activities (e.g., kayaking, rafting, fly fishing, scuba diving)
- Respond to medical and trauma situations in backcountry settings, including water rescues
- Employ wilderness survival techniques

HWE 129	Wilderness First Responder	4
OUT 108	Wilderness Survival Skills	3
OUT 116	River Orientation	2
OUT 119	Flyfishing I	1
OUT 120	Flyfishing II	1
OUT 136	Leave No Trace Trainer Cert.	2
OUT 137	Kayaking	1
OUT 140	Swift Water Rescue Tech I	1
OUT 144	Backcountry Cooking	1
OUT 201	Scuba Diving	1
OUT 218	River Orientation II	2
Total Credit Hours		20

Winter Field Studies

This Winter Field Studies certificate is designed to prepare students to work in a variety of outdoor settings. Students will acquire skills in emergency medical care techniques useful in backcountry settings that enable them to respond correctly to medical and trauma situations, as well as basic search and rescue techniques. In particular, students will learn winter wilderness survival techniques in the nivean environment at or near timberline, backcountry cooking, and technical ice climbing skills. Students will learn about snow and avalanche phenomena, hazard evaluation, rescue, avalanche forecasting and mitigation.

Program Learning Outcomes

Upon completion of the Winter Field Studies certificate program, students should be able to:

- Build snow shelter and practice winter survival techniques
- Prepare for winter backcountry trips (e.g., ice climbing, snowshoeing, skiing)
- Respond to medical and trauma situations
- Practice search and rescue in various wilderness environment incidents, including avalanches
- Gather and interpret terrain information to assess avalanche hazard

HWE 129	Wilderness First Responder	4
OUT 109	Winter Wilderness Survival Skills	2
OUT 129	Ice Climbing I	1
OUT 136	Leave No Trace Trainer Cert.	2
OUT 144	Backcountry Cooking	1
OUT 167	Basic Search & Rescue	3
OUT 168	Avalanche Awareness Level I	1
OUT 169	Avalanche Awareness Level II	2
Total Credit Hours		16

Additional information available on the Outdoor Leadership & Recreation Technology Department website at www.pgcc.edu/outdoor-leadership.

Paralegal/Legal Assistant

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy for MAT 120

For more than three decades, the Paralegal program has been educating and training students to meet the needs of the local legal market, while providing students with opportunities beyond the law office environment. The program is an institutional member of the American Association for Paralegal Education, the National Association of Legal Assistants / Paralegals, and the National Federation of Paralegal Associations.

The objectives of the program are to (1) train students for employment as paralegals in a variety of legal settings; (2) provide opportunities for students who wish to upgrade existing job skills; and (3) provide coursework and transfer information to students who are interested in continuing their education.

The Paralegal Program at Pikes Peak Community College is accredited by the American Bar Association. This accreditation necessitates a student to receive a "C" or better in any required course, which a student seeks to count towards the A.A.S. Degree or Legal Technician Certificate. This requirement includes all PAR program designated courses (Legal Specialty and Legal Electives), transfer credits, as well as General Education courses (Electives and Required Core) taken at Pikes Peak Community College. A "C" is defined as an overall course grade requiring a 70% or better. This includes grades designated as "Satisfactory" by Pikes Peak Community College and the Colorado Community College System.

Graduates will be qualified to perform basic legal research, draft various legal documents, conduct client and witness interviews, participate in basic fact-finding and investigation, and assist in trial preparation. They will also be knowledgeable about the rules of professional and ethical conduct.

Graduates are not authorized to practice law. The Paralegal program provides training perform substantive legal work under the supervision of a licensed attorney.

Program Learning Outcomes

Upon completion of the Paralegal/Legal Assistant degree program, students should be able to:

- Recall key concepts and issues set forth by the American Bar Association in core legal study areas
- Prepare legal documents that comply with industry standards, Court rules and procedures

- Properly handle, analyze, and disseminate legal documents in relation to the Work Product Doctrine, the Attorney Client Privilege, and the Colorado Rules Professional Conduct
- Recall key concepts and terminology relating to the American legal system, Courts and legal precedence
- Use critical thinking skills and legal research skills to solve legal problems and make well-reasoned legal and ethical decisions

General Education Courses

ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
or		
COM 115	Public Speaking	(3)
MAT 120	Mathematics for the Liberal Arts: MA1	4
POS 111	American Government: SS1	3
or		
POS 125	American State & Local Government: SS1	(3)
Elective	Choose six (6) hours level 110 or higher (CRJ, LIT, ENG, PHI, POS, PSY, SOC)	6
		<u>19</u>

Additional Required Courses

PAR 114	Computers & the Law	3
PAR 115	Introduction to Law	3
PAR 116	Torts	3
PAR 117	Family Law	3
PAR 118	Contracts	3
PAR 125	Property Law	3
PAR 127	Legal Ethics	3
PAR 201	Civil Litigation	3
PAR 202	Evidence	3
PAR 205	Criminal Law	3
PAR 206	Business Organizations	3
PAR 208	Probate & Estates	3
PAR 209	Constitutional Law	3
PAR 213	Legal Research & Writing I	3
PAR 280	Internship	3
or		
PAR 287	Cooperative Education	(3)
		<u>45</u>
Total Credit Hours		64

Certificate

Legal Technician

This certificate is designed for college graduates interested in gaining critical skill necessary to work in the legal support industry. This certificate program offering is only available to those students who possess (at the time of entry into the program) a Bachelor's Degree or HIGHER from a regionally accredited college or university. Students not possessing an approved degree must enroll in the Paralegal Associate of Applied Science program.

The Paralegal Program at Pikes Peak Community College is accredited by the American Bar Association. This accreditation necessitates a student to receive a "C" or better in any required course, which a student seeks to count towards the A.A.S. Degree or Legal Technician Certificate. This requirement includes all PAR program designated courses (Legal Specialty and Legal Electives), transfer credits, as well as General Education courses (Electives and Required Core) taken at Pikes Peak Community College. A "C" is defined as an overall course grade requiring a 70% or better. This includes grades designated as "Satisfactory" by Pikes Peak Community College and the Colorado Community College System.

Program Learning Outcomes

Upon completion of the Legal Technician certificate program, students should be able to:

- Recall key concepts, terminology and issues set forth by the American Bar Association in core legal study areas
- Prepare legal documents that comply with industry standards, Court rules and procedures
- Create, analyze, and disseminate legal documents in relation to the Work Product Doctrine, the Attorney Client Privilege, and the Colorado Rules Professional Conduct
- Resolve legal problems using appropriate research strategies and ethical reasoning

PAR 114	Computers & the Law	3
PAR 115	Introduction to Law	3
PAR 117	Family Law	3
PAR 127	Legal Ethics	3
PAR 201	Civil Litigation	3
PAR 202	Evidence	3
PAR 205	Criminal Law	3
PAR 213	Legal Research & Writing I	3
Total Credit Hours		24

Additional information available on the Paralegal Department website at www.pgcc.edu/par.

Pharmacy Technician

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

The Pharmacy Technician Program holds dual accreditation by the American Society of Health-System Pharmacists and the Accreditation Council for Pharmacy Education (ASHP/ACPE).

Pharmacy Technicians assist and support licensed pharmacists in providing health care and medications to patients. The pharmacy technician has broad knowledge and training in pharmacy, however, does not require the advanced college education required of a licensed pharmacist. Pharmacy technicians perform the practical duties, allowing the pharmacist to focus on patient education, pharmaceutical care and medication management.

Admission to the college does not assure admission to the pharmacy technician program. All students interested in the pharmacy technician program who do not have previous college courses must complete the PCC placement exams prior to being advised. Admission to the pharmacy technician program is accomplished through an application and selection process. Students can pick up a Pharmacy Technician Program Admission Application at the Division of Medical Sciences office at the Center for Healthcare Education and Simulation Campus. **NO APPLICATION WILL BE REVIEWED THAT IS NOT FULLY COMPLETED.** Once completed, please submit to the Pharmacy Technician Program Coordinator, and make an appointment to review necessary information at that time.

Pharmacies and varying facilities where pharmacy technicians are employed require criminal background checks and drug screens for both employment and all students completing clinical rotations. For information on specific disqualifiers, students should contact a PHT faculty advisor. Students who do not obtain a PCC approved criminal background check and drug screen as according to program policy will not be allowed to complete the

program or enroll in internship classes. Failure to pass the above tests will result in the inability to complete the desired certificate or degree.

Students should complete specific program prerequisites and meet with the PHT Program Director prior to submitting the pharmacy technician application. Courses to be completed prior to application to the program are CSC 105 or CIS 118, College Reading & Writing Literacy and College Quantitative Literacy.

Upon provisional acceptance, the program director will notify the student of dates needed to obtain additional information.

- Criminal background check
- Drug Screen
- Health statement/immunizations

Program Learning Outcomes

Upon completion of the Pharmacy Technician degree program, students should be able to:

- Collect, organize, and evaluate information for direct patient care
- Prepare prescriptions accurately in both the community and institutional pharmacy settings
- Perform mathematical calculations required to verify the measurements, preparation, and/or packaging of medication
- Illustrate skills and knowledge that align with the critical knowledge domains of the National Pharmacy Technician Certification Exam (PTCE)

General Education Courses

CIS 155	Complete Spreadsheets: (Software package)	3
COM 225	Organizational Communication	3
ENG 121	English Composition I: CO1	3
MAT 103	Math for Clinical Calculations	3
PSY 100	Psychology of Workplace Relationships	3
		15

Additional Required Courses

CHE 101	Introduction to Chemistry I w/Lab: SC1 or	5
BIO 111	General College Biology I w/Lab: SC1	(5)
HPR 102	CPR for Professionals	0.5
HPR 178	Medical Terminology	2
HPR 208	Medical Record Terminology	2
HWE 100	Human Nutrition	3
PHT 111	Introduction to Pharmacy	3
PHT 112	Pharmacy Law	2
PHT 114	Computer Skills for Pharmacy Technicians	1
PHT 115	Pharmacology I	3
PHT 116	Institutional Pharmacy	3
PHT 118	Pharmacology II	3
PHT 119	Community Pharmacy	3
PHT 170	Pharmacy Clinical: Institutional	4
PHT 171	Pharmacy Clinical: Community	4
PHT 235	Pharmaceutical Calculations & Compounding Techniques	4
PHT 250	Sterile Compounding & Aseptic Technique	2
PHT 255	Advanced Pharmacy Practice	2
		46.5

Total Credit Hours 61.5

Certificates

Advanced Pharmacy Practice

Students must successfully complete the initial PPCC Pharmacy Technician certificate program before being eligible to complete the Advanced Pharmacy Practice certificate. With this advanced certificate students learn how to use spreadsheets and become familiar with necessary medical terminology. Additionally, they learn the methods and regulation of sterile products, the mastery of aseptic technique, and the production of sterile preparations. Students also learn about career opportunities for pharmacy professionals.

Students that register for the advanced pharmacy practice courses without first meeting this requirement and having approval from the program director will be administratively withdrawn from the course.

Program Learning Outcomes

Upon completion of the Advanced Pharmacy Practice certificate program, students should be able to:

- Prepare a variety of basic and complex sterile products
- Demonstrate proper technique in aseptic garbing, hand washing, and gloving according to pharmaceutical guidelines USP <797>
- Explain the roles and responsibilities of pharmacy technicians associated with different practices (e.g., hospice care, home care)
- Interpret medical records using medical terminology

CIS 155	Complete Spreadsheets: (Software package)	3
HPR 178	Medical Terminology	2
HPR 208	Medical Record Terminology	2
PHT 250	Sterile Compounding & Aseptic Technique	2
PHT 255	Advanced Pharmacy Practice & Nontraditional Roles	2

Total Credit Hours **11**

Pharmacy Technician

This certificate program prepares students to assist in the preparation of prescribed medications, including retrieval, counting, pouring, weighing, measuring, and mixing medications. Students will explore the skills and techniques required to assist pharmacists in community and hospital settings.

Program Learning Outcomes

Upon completion of the Pharmacy Technician certificate program, students should be able to:

- Prepare medications for distribution, including compounding, with considerations regarding controlled substances and patient communication, in community and institutional pharmacy settings
- Evaluate drugs used to treat a variety of disorders (e.g., routes of administration, dosing, side effects)
- Demonstrate knowledge of the use and side effects of prescription and nonprescription drugs used to treat common disease states
- Perform pharmaceutical calculations applicable to job responsibilities in both community and institutional pharmacy settings
- Perform patient monitoring procedures and point-of-care testing (e.g., blood glucose monitoring, finger stick, blood pressure)
- Prepare sterile products using aseptic techniques

- Manage a variety of pharmacy functions using computer management systems (e.g., drug reference resources, prescription processing, insurance documentation, inventory)
- Ensure compliance with laws, regulations, professional ethical standards, and agencies that pertain to pharmacy practice

COM 225	Organizational Communication	3
HPR 102	CPR for Professionals	0.5
PHT 111	Introduction to Pharmacy	3
PHT 112	Pharmacy Law	2
PHT 114	Computer Skills for Pharmacy Technicians	1
PHT 115	Pharmacology I	3
PHT 116	Institutional Pharmacy	3
PHT 118	Pharmacology II	3
PHT 119	Community Pharmacy	3
PHT 170	Pharmacy Clinical: Institutional	4
PHT 171	Pharmacy Clinical: Community	4
PHT 235	Pharmaceutical Calculations & Compounding Techniques	4

Total Credit Hours **33.5**

Additional information available on the Pharmacy Technician Department website at www.pccc.edu/pharmacy-technician.

Phlebotomy Certificate

Recommended basic skills courses are

- College Reading & Writing Literacy

In the Phlebotomy certificate program, students will learn theory, anatomy and physiology, microbiology, and proficiency in collection of tissue and blood samples from patients in a variety of settings. Students will learn customer service, communication skills necessary to work with patients and legal issues governing medical concerns and ethical issues. Career options are covered, and students will be prepared for a career in phlebotomy. Upon successful completion of the required courses, students will qualify to take the National Registry Board Exam for Registered Phlebotomy Technician (RPT). Students must be 18 years of age to register for HPR 112 and HPR 113. This certificate can be completed within two semesters if coursework is completed as advised. Some credits from this program may be applied to the Medical Assistant AAS degree option. Credits may also be applied to the Allied Health AAS degree.

Students must have a grade of C or better in all courses to pass certification requirements.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have permission of coordinator to enroll.

Clinical experience included in HPR 112 and HPR 113 courses require additional considerations prior to enrollment, which include:

- Proof of vaccines or blood titers for: tuberculin skin tests, proof of measles, rubella and rubeola, proof of hepatitis B, current year flu vaccination, chickenpox (Varicella), and a current tetanus by the first week of the semester;
- Criminal background checks on all students;
- For specific disqualifiers on the background investigation, students should contact a MOT faculty advisor;
- Students who do not obtain the PPCC approved criminal background investigation will not be able to enroll in the two phlebotomy courses, HPR 112 and HPR 113;

- Take and pass drug and alcohol screening prior to their phlebotomy clinical experience;
- Students must be at least 18 years of age to qualify for certain courses (HPR 112 & HPR 113) within this program;
- Current CPR certification;
- Students will need to obtain a college ID special issue for clinical access.

Failure to pass the criminal background or drug screen test will result in the inability to complete the desired certification or degree.

The criminal background check and drug screening process is completed online through the PCC Human Resources Department, with associated cost for the background check and urine drug screening services. Further information is available on the program home page and will be provided upon advising with the program coordinator and the first day of class for HPR 112 and HPR 113.

Program Learning Outcomes

Upon completion of the Phlebotomy certificate program, students should be able to:

- Illustrate body system structures
- Apply medical terminology in appropriate situations
- Discuss legal and ethical issues as applicable to health professions
- Apply effective interpersonal skills for diverse patient and medical professionals
- Obtain blood and other body specimens for laboratory analysis
- Perform point of care testing

HPR 101	Customer Service in Healthcare	2
HPR 106	Law & Ethics for Health Professions	2
HPR 112	Phlebotomy	4
HPR 113	Advanced Phlebotomy	4
HPR 139	Medical Terminology	2
HPR 208	Medical Record Terminology	2
Total Credit Hours		16

Additional information available on the Phlebotomy Department website at www.pcc.edu/phlebotomy.

Physical Therapy Assistant

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Physical therapist assistants (PTAs) work as part of a team to provide physical therapy services under the direction and supervision of the physical therapist. PTAs assist the physical therapist in the treatment of individuals of all ages, from newborns to the very oldest, who have medical problems or other health-related conditions that limit their abilities to move and perform functional activities in their daily lives.

The physical therapist is responsible for the services provided by the PTA. Physical therapists (PTs) are health care professionals who examine each individual and develop a plan using treatment techniques to promote the ability to move, reduce pain, restore function, and prevent disability. In addition, PTs work with individuals to prevent the loss of mobility before it occurs by

developing fitness- and wellness-oriented programs for healthier and more active lifestyles.

PTAs provide care for people in a variety of settings, including hospitals, private practices, outpatient clinics, home health agencies, schools, sports and fitness facilities, work settings, and nursing homes.

Program Learning Outcomes

Upon completion of the Physical Therapy Assistant degree program, students should be able to:

- Eligible to sit for Licensure examination
- Work under the supervision of a physical therapist in an ethical, legal, safe, and professional manner
- Implement a comprehensive treatment plan developed by a physical therapist promoting optimal outcomes for patients
- Recognize the relationship between concepts learned from liberal arts and basic science coursework and physical therapy knowledge and skills
- Demonstrate effective oral, written, and nonverbal communication in a culturally competent manner with patients and their families, colleagues, other health care providers, and the public
- Interact skillfully with patients across the life span
- Demonstrate a commitment to professional growth and life-long learning

General Education Courses

BIO 201	Human Anatomy and Physiology I: SC1	4
COM 115	Public Speaking	3
ENG 121	English Composition I: CO1	3
HPR 178	Medical Terminology	2
MAT 107	Career Mathematics	3
PHY 105	Conceptual Physics	4
		19

Additional Required Courses

HPR 117	Advanced Kinesiology	3
PTA 110	Basic Patient Care in Physical Therapy	5
PTA 115	Principles and Practice of Physical Therapy	2
PTA 120	Modalities in Physical Therapy	5
PTA 124	Rehab Principles of Medical I	2
PTA 131	Professional Communications I	1
PTA 134	Rehab Principles of Medical II	2
PTA 135	Principles of Electrical Stimulation	2
PTA 140	Clinical Kinesiology	5
PTA 141	Professional Communications II	1
PTA 205	Psychosocial Issues in Health Care	2
PTA 230	Orthopedic Assessment and Management Techniques	5
PTA 240	Neurologic Assessment and Management Techniques	5
PTA 251	Professional Communications III	1
PTA 278	PTA Seminar	2
PTA 280	PTA Internship I	4
PTA 281	PTA Internship II	5
PTA 282	PTA Internship III	5
		57
Total Credit Hours		76

Pikes Peak Regional Law Enforcement Academy

Certificate

Recommended basic skills courses are

- College Reading & Writing Literacy

The Pikes Peak Regional Law Enforcement Academy provides qualified individuals the opportunity to gain the skills to become a law enforcement officer. The Academy offers a basic recruit curriculum sanctioned by the Peace Officers Standards and Training (P.O.S.T.). During their enrollment, students take approximately 525 hours of coursework. At the end of the training program, P.O.S.T. administers the final certification exam. Those who successfully complete the exam are granted P.O.S.T. certification for three years. Colorado State Law requires that all individuals be P.O.S.T. certified prior to applying to a law enforcement agency. * Candidates will be subject to appropriate background checks.

Admission to the Pikes Peak Regional Law Enforcement Academy is accomplished through an application and selection process. Admission to the college does not guarantee admission into the Academy.

Additional requirements for admission to the Pikes Peak Regional Law Enforcement Academy may apply.

*Some agencies may require employees to attend their academy as a condition of employment.

Program Learning Outcomes

Upon completion of the Pikes Peak Regional Law Enforcement Academy certificate program, students should be able to:

- Perform entry level duties of a peace officer (e.g., collect evidence, perform a vehicle stop, conduct interviews, write police reports)
- Recognize and explain criminal and traffic code violations
- Employ appropriate arrest control techniques
- Drive a law enforcement vehicle under emergency or pursuit conditions
- Use and handle police firearms effectively

LEA 101	Basic Police Academy I	6
LEA 102	Basic Police Academy II	12
LEA 103	Basic Law Enforcement Academy III	2
LEA 104	Basic Law Enforcement Academy IV	1
LEA 105	Basic Law	8
LEA 106	Arrest Control Techniques	3
LEA 107	Law Enforcement Driving	3
LEA 108	Firearms	3
PED 110	Fitness Center Activity I	1
Total Credit Hours		39

Additional information available on the Law Enforcement Academy Department website at www.pppcc.edu/lea.

Professional Photography

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

This program prepares the students for entry-level work in some of the following creative and exciting areas: portrait, commercial, outdoor, photojournalism, product, and fine-art photography. In addition, students may enter support industries, which include photo digital imaging and enhancement and photo lab technician. Students receive a blend of knowledge in technical camera skills, composition and creative thought, and computer software. Students will also choose from a variety of course electives.

Maximizing student success in the Professional Photography program is the department goal. The program faculty recommends that students develop the following desirable skill and knowledge foundations to enhance student success:

- advanced college level study skills
- working knowledge of algebraic principles and basic measurement
- college-level reading, writing, comprehension, and study skills
- working knowledge and application of college-level English
- demonstrated time management skills
- keyboarding, mouse, and computer experience.

It is strongly recommended that students see an advisor for program planning. Students may complete basic skill deficiencies concurrently with the beginning courses in the program. Students must arrange with advisors to remedy deficiencies in program requirements. Please call 719-502-3130 for advising.

Students can access detailed descriptions of each program course under the ART, PHO and MGD prefixes lists.

Program Learning Outcomes

Upon completion of the Photography degree program, students should be able to:

- Describe photography works and techniques using the appropriate vocabulary
- Convey a message through a visual medium in a way that reflects mastery of artistic composition
- Produce visual imagery that shows a mastery of technical knowledge in camera operation, lighting, and computer manipulation
- Evaluate the creative and compositional aspects of photography using a variety of styles and genres
- Critically analyze and interpret photographic images
- Produce a professional-level body of photographic work

General Education Courses

ART 110	Art Appreciation: AH1	3
COM 115	Public Speaking	3
	or	
COM 125	Interpersonal Communication	(3)
CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
ENG 121	English Composition I: CO1	3
MAT 107	Career Math	3
		15

Additional Required Courses

ART 113	History of Photography	3
ART 144	Portrait Photography	3
PHO 120	Fundamentals of Photography	3
or		
ART 139	Digital Photography I	(3)
PHO 205	Professional Digital Photo I	3
or		
ART 239	Digital Photography II	(3)
PHO 226	Digital Workflow Management	3
PHO 232	Professional Portraiture	3
PHO 234	View Camera/Lighting Technique	3
PHO 236	Product Photography	3
PHO 237	Advanced Lighting Technique	3
PHO 260	Events & Wedding Photography	3
PHO 263	Digital Capture Processing III	3
PHO 268	Portfolio & Career Exploration	3
PHO 269	Business of Photography	3
PHO 280	Internship	1
PHO 281	Internship	1
Elective	Choose nine (9) from the list below	9

Total Credit Hours **50**

Electives

ART 139	Digital Photography I	3
ART 142	Landscape Photography	3
ART 207	Art History 1900 to Present: AH1	3
ART 239	Digital Photography II	3
ART 242	Alternative Photo Processes	3
BUS 115	Introduction to Business	3
MGD 111	Adobe Photoshop I	3
MGD 211	Adobe Photoshop II	3
MGD 259	Management & Production	3
MGD 268	Business for Creatives	3
PHO 105	Photo & Computer Orientation	3
PHO 235	Architectural Photography	3
PHO 258	Wildlife Photography	3
PHO 266	Pro Digital Workflow: Software	3

Certificates**Location Photography**

This Location Photography certificate is designed to prepare students to shoot photographs in a variety of settings outside of the studio. Students learn traditional and contemporary approaches to landscape photography, operate image manipulation software using scanning equipment and software tools, and also learn about freelance work and the business of photography.

Program Learning Outcomes

Upon completion of the Location Photography certificate program, students should be able to:

- Use traditional and contemporary approaches to landscape photography
- Create photographic projects using a variety of digital imaging techniques
- Create a business identity package including résumés, cover letters, and promotional pieces

ART 142	Landscape Photography	3
PHO 120	Fundamentals of Photography	3
or		
ART 139	Digital Photography I	(3)
PHO 205	Professional Digital Photo I	3
PHO 226	Digital Workflow Management	3
PHO 269	Business of Photography	3

Total Credit Hours **15**

Photography Post Production & Output

This Photography Post Production & Output certificate is designed to prepare students to use various technical and creative approaches to the post production of photographs. Students learn traditional and contemporary approaches to landscape photography, operate image manipulation software using scanning equipment and software tools, and learn about freelance work and the business of photography. Students also learn about freelance work and the business of photography. Students create a computer-based portfolio and a printed presentation portfolio of their work.

Program Learning Outcomes

Upon completion of the Photography Post Production and Output certificate program, students should be able to:

- Create photographic projects using a variety of digital imaging techniques
- Use professional post-processing techniques to enhance digital captures
- Create computer-based and printed photographic portfolios
- Create a business identity package including résumés, cover letters, and promotional pieces

MGD 111	Adobe Photoshop I	3
PHO 120	Fundamentals of Photography	3
or		
ART 139	Digital Photography I	(3)
PHO 205	Professional Digital Photo I	3
PHO 226	Digital Workflow Management	3
PHO 263	Digital Capture Processing III	3
PHO 268	Portfolio & Career Exploration	3
PHO 269	Business of Photography	3

Total Credit Hours **21**

Portrait Photography

This Portrait Photography certificate is designed to prepare students to shoot portrait photography in a variety of settings inside and outside of the studio. Students learn the technical and aesthetic aspects of studio and location portrait photography, as well as learning about the field of portraiture including event-based, environmental, editorial, and studio. Emphasis is placed on advanced camera and flash techniques, candid, formal and ceremonial photography, as well as the business and planning aspects of professional photography at events, weddings, graduations, and other similar occasions.

Program Learning Outcomes

Upon completion of the Portrait Photography certificate program, students should be able to:

- Create a business identity package including résumés, cover letters, and promotional pieces
- Use various lighting techniques and schemes required for portrait photography
- Use advanced camera and flash techniques common to events and wedding photography

ART 144	Portrait Photography	3
PHO 120	Fundamentals of Photography	3
or		
ART 139	Digital Photography I	(3)
PHO 205	Professional Digital Photo I	3
PHO 226	Digital Workflow Management	3
PHO 232	Professional Portraiture	3
PHO 260	Events & Wedding Photography	3

Total Credit Hours **18**

Additional information available on the Professional Photography Department website at www.pgcc.edu/photography.

Radio & Television

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

The AAS degree in RTV will prepare you to enter the television, radio and online content creation industries. In addition to course work, and to enhance the learning process, you will also complete internships at local broadcast and/or video production facilities. When you successfully complete the AAS degree in RTV you may be employed as an announcer, producer, director, writer, multimedia journalist, board operator or in a number of other non-broadcast occupations such as audio or video production.

Program Learning Outcomes

Upon completion of the Radio & Television degree program, students should be able to:

- Produce and direct live television programs including: News segments, interview shows, Sports updates, and Weathercasts
- Produce, shoot, and edit television commercials, silent films, and institutional videos
- Produce and record radio: promotions, news updates, commercials, and regular airtime
- Operate necessary production equipment
- Write effective scripts for a multitude of productions, from commercials to newscasts
- Work in, and foster, a cooperative, team environment

General Education Courses

ANT 101	Cultural Anthropology: SS3	3
or		
SOC 101	Introduction to Sociology I: SS3	(3)
or		
PSY 101	General Psychology I: SS3	(3)
BUS 115	Introduction to Business	3
CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
ENG 121	English Composition I: CO1	3
or		
COM 115	Public Speaking	(3)
MAT 107	Career Math	3
		<u>15</u>

Additional Required Courses

RTV 100	Introduction to Electronic Media	3
RTV 101	Radio Programming & Production I	3
RTV 102	Beginning Television	3
RTV 103	Writing for Television & Radio	3
or		
RTV 104	Corporate Scriptwriting	(3)
RTV 108	Principles of Audio	3
or		
RTV 210	Audio Mixing	(3)
RTV 120	News & Sports Writing & Reporting	3

RTV 180	Internship-KEPC Radio	4
or		
RTV 181	Internship-College ITV Studio	(4)
or		
RTV 182	Internship-Radio Station/Audio Production Company	(4)
or		
RTV 183	Internship-Television Studio/Video Production Company	(4)
RTV 208	Basic Video Production	3
RTV 211	Radio Programming & Production II	3
or		
RTV 212	Advanced Television Production	(3)
RTV 260	Broadcast Management	3
RTV 280	Internship-TV Studio/Video Production II	3
or		
RTV 281	Internship in the News-KEPC Radio	(3)
or		
RTV 282	Internship-KEPC Radio II	(3)
or		
RTV 283	Internship-Radio Station/Audio Production II	(3)
or		
RTV 284	Internship in Telecommunications	(3)
Elective	Choose twelve (12) hours from list below	<u>12</u>
		46

Total Credit Hours **61**

Electives

MGD 102	Introduction to Multimedia	3
MGD 111	Adobe Photoshop I	3
MGD 112	Adobe Illustrator I	3
MGD 141	Web Design I	3
MGD 164	Digital Video Editing I	3
MGD 165	After Effects I	3
MGD 211	Adobe Photoshop II	3
MGD 212	Adobe Illustrator II	3
PHO 101	Professional Photography I	3
PHO 105	Photo & Computer Orientation	2
PHO 120	Fundamentals of Photography	3
RTV 103	Writing for Television & Radio	3
RTV 104	Corporate Scriptwriting	3
RTV 108	Principles of Audio	3
RTV 180	Internship-KEPC Radio	4
RTV 181	Internship-College ITV Studio	4
RTV 182	Internship-Radio Station/Audio Production Company	4
RTV 183	Internship-Television Studio/Video Production Company	4
RTV 210	Audio Mixing	3
RTV 211	Radio Programming & Production II	3
RTV 218	Advanced Video Production	3
RTV 280	Internship-TV Studio/Video Production II	3
RTV 281	Internship in the News-KEPC Radio	3
RTV 282	Internship-KEPC Radio II	3
RTV 283	Internship-Radio Station/Audio Production II	3
RTV 284	Internship in Telecommunications	3
THE 111	Acting I	3
THE 140	Stage Dialects	1
THE 204	Voice & Articulation I	2
THE 216	Theatre Lighting & Design	3

Certificates

Advanced Radio Production and Operations

Students who elect to complete an Advanced Radio Production and Operations certificate learn specialized broadcast skills in a shorter period of time than they would with an Associate of Applied Science degree. Students learn about radio programming, formats, and audience rating surveys, professional writing techniques for television and radio, corporate scriptwriting, as well as news and sports writing, and the role of the Federal Communications Commission. Additionally, students learn about broadcasting and production equipment and how to use audio equipment and mixer to produce audio tracks for radio production.

Program Learning Outcomes

Upon completion of the Advanced Radio Production and Operations certificate program, students should be able to:

- Write scripts for television, radio, and institutional video productions
- Report news and sporting events by radio broadcasts
- Create audio tracks for radio and television productions
- Manage day-to-day radio and television station operations
- Apply management skills in the broadcast workplace and arena

RTV 101	Radio Programming & Production I	3
RTV 103	Writing for Television & Radio	3
	or	
RTV 104	Corporate Scriptwriting	(3)
RTV 108	Principles of Audio	3
RTV 120	News & Sports Writing & Reporting	3
RTV 180	Internship-KEPC Radio	4
RTV 182	Internship-Radio Station/Audio Production Company	4
RTV 210	Audio Mixing	3
RTV 211	Radio Programming & Production II	3
RTV 260	Broadcast Management	3
RTV 283	Internship-Radio Sta/Audio Production II	3
Total Credit Hours		32

Advanced Television and Video Production

Students who elect to complete an Advanced Television and Video Production certificate learn specialized broadcast skills in a shorter period of time than they would with an Associate of Applied Science degree. Students learn about television production, from concept through script to actual studio production, preproduction, and postproduction, professional writing techniques for television and radio, corporate scriptwriting, as well as news and sports writing. Additionally, students learn about broadcasting and production equipment and how to use audio equipment and mixer to produce audio tracks for television production, basic videotape production and editing on linear and non-linear editing systems.

Program Learning Outcomes

Upon completion of the Advanced Television and Video Production certificate program, students should be able to:

- Write scripts for television, radio, and institutional video productions
- Create audio tracks for radio and television productions
- Create advanced video productions using industry standards
- Manage day-to-day radio and television station operations

RTV 102	Beginning Television	3
RTV 103	Writing for Television & Radio	3
RTV 104	Corporate Scriptwriting	3
RTV 108	Principles of Audio	3

RTV 181	Internship-College ITV Studio	4
RTV 183	Internship-Television Studio/Video Production Company	4
RTV 208	Basic Video Production	3
RTV 212	Advanced Television Production	3
RTV 218	Advanced Video Production	3
RTV 260	Broadcast Management	3
Total Credit Hours		32

Basic Radio Production

Students who elect to complete a Basic Radio Production certificate learn specialized broadcast skills in a shorter period of time than they would with an Associate of Applied Science degree. Students learn about radio programming, formats, and audience rating surveys, professional writing techniques for television and radio. Additionally, students learn about basic audio production techniques and how to use audio equipment and mixer to produce audio tracks for radio and television production. Students learn the fundamentals of audio mixing from the audio source to final master and demonstrate linear and non-linear master mixing. Students get on-the-air experience on the college FM radio station.

Program Learning Outcomes

Upon completion of the Basic Radio Production certificate program, students should be able to:

- Write scripts for television, radio, and institutional video productions
- Create audio tracks for radio and television productions
- Report news, sports events, and weather conditions by radio broadcast

RTV 101	Radio Programming & Production I	3
RTV 103	Writing for Television & Radio	3
	or	
RTV 104	Corporate Scriptwriting	(3)
RTV 108	Principles of Audio	3
RTV 180	Internship-KEPC Radio	4
RTV 210	Audio Mixing	3
RTV 211	Radio Programming & Production II	3
Total Credit Hours		19

Basic Television Production

Students who elect to complete a Basic Television Production certificate learn specialized broadcast skills in a shorter period of time than they would with an Associate of Applied Science degree. Students learn about television production, from concept through script to actual studio production, preproduction, and postproduction. Additionally, students learn about broadcasting and production equipment and how to use audio equipment and mixer to produce audio tracks for television production, basic videotape production and editing on linear and non-linear editing systems.

Program Learning Outcomes

Upon completion of the Basic Television Production certificate program, students should be able to:

- Write scripts for television, radio, and institutional video productions
- Create video and television productions (e.g., commercial, documentary)
- Discuss the ethics and legal aspects of television production and aesthetics

RTV 102	Beginning Television	3
RTV 103	Writing for Television & Radio	3
	or	
RTV 104	Corporate Scriptwriting	(3)
RTV 181	Internship-College ITV Studio	4
RTV 208	Basic Video Production	3
RTV 212	Advanced Television Production	3
RTV 218	Advanced Video Production	3
Total Credit Hours		19

Additional information available on the Radio & Television Department website at www.pgcc.edu/degrees-certificates/radio-television.

Radiology: University of Colorado Health / Memorial Health System School of Radiologic Technology / PPCC Collaborative Program

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy for MAT 107
- College Algebraic Literacy for MAT 121

This collaborative program offers the student the opportunity to earn an AAS Degree in Radiologic Technology.

The student will fulfill the PPCC residency requirements ideally with the pre-requisite courses. If any or all of the pre-requisite courses are transferred to PPCC, then to fulfill the residency course work, the student must choose up to 15 credit hours from the electives course list below. These courses will assist in the selection process to the Memorial program. They will apply to the Memorial program. There is no guarantee of admission. Upon completion of the program, the Memorial program coursework will be transferred back to PPCC for 57 hours. The student will then be awarded the degree. Students must meet the minimum credit requirement of 75 credits for this degree. A&P classes must have an in-class lab section and completed within 7 years.

Program Learning outcomes

Upon completion of the Radiologic Technology degree program, students should be able to:

- Use proper positioning skills
- Practice patient safety
- Communicate in the healthcare arena both orally and in writing
- Complete radiological exams under various conditions

General Education Courses

BIO 201	Human Anatomy & Physiology I w/Lab: SC1	4
BIO 202	Human Anatomy & Physiology II w/Lab: SC1	4
ENG 121	English Composition I: CO1	3
MAT 107	Career Math	3
	or	
MAT 121	College Algebra: MA1	(4)
PSY 101	General Psychology I: SS3	3
		<hr/>
		17-18

Additional Required Courses

RTE 101	Introduction to Radiography	2
RTE 111	Radiographic Patient Care	2
RTE 121	Radiologic Procedures I	3

RTE 122	Radiologic Procedures II	3
RTE 141	Radiographic Equipment & Imaging I	3
RTE 142	Radiographic Equipment & Imaging II	3
RTE 181	Radiographic Internship I	5
RTE 182	Radiographic Internship II	5
RTE 183	Radiographic Internship III	7
RTE 221	Advanced Medical Imaging	3
RTE 231	Radiation Biology/Protection	2
RTE 281	Radiographic Internship IV	8
RTE 282	Radiographic Clinical Internship V	8
RTE 289	Capstone	3
		<hr/>
		57
Total Credit Hours		75

Electives

(Please contact your Radiology Technologist advisor before applying these to the AAS degree.)

CHE 111	General College Chemistry w/Lab: SC1	5
CSC 105	Computer Literacy	3
HPR 101	Customer Service in Healthcare	2
HPR 106	Law & Ethics for Health Professions	2
HPR 112	Phlebotomy	4
HPR 113	Advanced Phlebotomy	4
HPR 139	Medical Terminology	2
HPR 208	Medical Record Terminology	2
MAP 150	Pharmacology for Medical Assistants	3
NUA 101	Nurse Aide Health Care Skills	4
NUA 170	Nurse Aide Clinical Experience	1
NUA 171	Advanced Nurse Aide Clinical	1
PHY 111	Physics: Algebra-Based I w/Lab: SC1	5
PSY 235	Human Growth & Development: SS3	3

Additional information available on the Radiologic Technology / PPCC Collaborative Program Department website at www.pgcc.edu/degrees-certificates/radiology-technology.

Robotics & Automation Systems Technology

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

This Associate degree program in Robotics and Automation is designed to prepare individuals for entry-level technician careers in the robotics and automation field. Graduates become qualified to work in electronic automation and in control systems environments. Students in this program focus on the principles behind robotic and automation technology. Classroom instruction focuses on principles of robotics, design, programming, operation of robotic systems, and robotics system maintenance. Automation systems include topics such as Programmable Logic Controllers, Sensors and Transducers and Fundamentals of DC/AC. Other classes focus on robotic language control, system repair, and robot computer systems, and design. A lab course is a mandatory component of this robotics degrees program, allowing students to work one-on-one with various types of robots and automation systems. To maximize student success in this program student are taught basic electronics and electronics assembly as well as other core course titles that include:

- Electro mechanics
- Mechatronics
- Microcomputer
- Electrical theory DC/AC

- Electrical circuits and wiring
- Computer aided design
- Robotic systems and design
- Supervisory Control and Data Acquisition
- Industrial Ethernet and Fiber Optic LANS
- Digital Devices
- Computer Aided Drafting 2D

Students who want to focus on a specific area of Robotics and Automation are encouraged to meet with the program faculty as there are options for electives and Certificate programs.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

Program Learning Outcomes

Upon completion of the Robotics and Automation Systems Technology degree program, students should be able to:

- Follow safety policies and/or procedures according to industry standards
- Perform troubleshooting techniques
- Interpret, analyze, and evaluate technical material
- Apply understanding of electrical circuits in DC and AC circuits
- Program a robot to perform a variety of tasks

General Education Courses

CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
COM 225	Organizational Communication	3
ENG 131	Technical Writing I: CO1 or higher	3
MAT 107	Career Math or higher	3
PSY 100	Psychology of Workplace Relationships	3
		<hr/> 15

Additional Required Courses

CAD 100	Print Reading for Computer Aided Drafting	3
CAD 101	Computer Aided Drafting I/2D I	3
EIC 230	Instrument and Process Control II	4
EIC 245	Supervisory Control & Data Acquisition	4
EIC 253	Fiber Optics Certification	1
EIC 259	Lan Certification/Repair/Troubleshooting	1
ELT 106	Fundamentals of DC/AC	4
ELT 146	Digital Devices in Computers	3
ELT 165	Electronic Assembly	3
ELT 252	Motors & Controls	3
ELT 257	Sensors & Transducers	3
ELT 258	Programmable Logic Controllers	3
ELT 259	Advanced Programmable Logic Controllers	3
ELT 261	Microprocessors	3
ELT 266	Advanced Electronic Assembly	3
ELT 267	Introduction to Robotics	1
ELT 268	Robotic Technologies	3
MAC 240	CAD/CAM 2D	3
		<hr/> 51

Total Credit Hours 66

Electives

CAD 255	SolidWorks/Mechanical	3
ELT 280	Internship	3

Certificates

Advanced Manufacturing Electronics

Students will learn about the equipment and components of instrumentation and control systems found in the process and energy supply industries, as well as basic operation and applications of microprocessors. Students will also learn how to program a robot in a higher-level language to perform various tasks.

Program Learning Outcomes

Upon completion of the Advanced Manufacturing Electronics certificate program, students should be able to:

- Follow safety policies and/or procedures according to industry standards
- Interpret and draw wire diagrams, schematics, and ladder logic diagrams to implement automation systems
- Apply the principles of basic electronic theory including operations and applications of basic DC/AC circuits
- Use the SolidWorks software package to create advanced models, parts, assemblies, and related documents (e.g., bill of materials, parts lists)
- Diagnose, troubleshoot, and repair electronic system problems, while completing the appropriate documentation
- Build, troubleshoot, and repair fiber optic and Local Area Networks (LANs)
- Operate, program, maintain, troubleshoot Programmable Logic Controllers (PLCs)
- Program, maintain, and troubleshoot robotic automated systems

CAD 100	Print Reading for Computer Aided Drafting	3
CAD 255	SolidWorks/Mechanical	3
CAD 259	Advanced SolidWorks	3
EIC 245	Supervisory Control & Data Acquisition	4
EIC 253	Fiber Optics Certification	1
EIC 259	Lan Certification/Repair/Troubleshooting	1
ELT 106	Fundamentals of DC/AC	4
ELT 146	Digital Devices in Computers	3
ELT 165	Electronic Assembly	3
ELT 252	Motors & Controls	3
ELT 258	Programmable Logic Controllers	3
ELT 266	Advanced Electronic Assembly	3
ELT 267	Introduction to Robotics	1
ELT 268	Robotic Technologies	3
		<hr/> 38

Total Credit Hours

38

Automated Systems

Students will learn the fundamentals of programmable logic controllers (PLCs) as they are applied in robotics and automation. Students also learn to test, repair, certify, and troubleshoot LAN and how to study, construct, test, and evaluate basic industrial control systems and common industrial processes.

Program Learning Outcomes

Upon completion of the Automated Systems certificate program, students should be able to:

- Interpret working drawings for various industries
- Interpret and draw wire diagrams, schematics, and ladder logic diagrams to implement automation systems
- Build, troubleshoot, and repair fiber optic networks and LANs
- Operate, program, maintain, troubleshoot PLCs
- Test and control common industrial processes using a variety of techniques and instruments (e.g., motors, generators, regulators, sensors, transducers)

- Troubleshoot digital circuits
- Construct, test, and troubleshoot electronic circuits
- Program, maintain, and troubleshoot advanced automated systems

CAD 100	Print Reading for Computer Aided Drafting	3
EIC 230	Instrument and Process Control II	4
EIC 253	Fiber Optics Certification	1
EIC 259	Lan Certification/Repair/Troubleshooting	1
ELT 106	Fundamentals of DC/AC	4
ELT 146	Digital Devices in Computers	3
ELT 252	Motors & Controls	3
ELT 257	Sensors & Transducers	3
ELT 258	Programmable Logic Controllers	3

Total Credit Hours **25**

Basic Automation

Students will acquire skills needed to address operating, monitoring, programming, troubleshooting, and repairing PLC controlled lab trainers as well as actual industrial equipment. Students will learn how to construct, test, and evaluate basic industrial control systems, including AC/DC motors, stepper motors, power sources, generators, tachometers, line diagrams and logic functions.

Program Learning Outcomes

Upon completion of the Basic Automation certificate program, students should be able to:

- Operate, program, maintain, troubleshoot, and repair programmable logic controllers (PLCs)

ELT 252	Motors & Controls	3
ELT 258	Programmable Logic Controllers	3

Total Credit Hours **6**

Basic Electronics

Students will learn about the testing, repair, certifying and troubleshooting of LAN as well as basic skills needed for many careers in electronics and related fields. Students also learn the basic logic concepts of computer circuits, including the troubleshooting of digital circuits.

Program Learning Outcomes

Upon completion of the Basic Electronics certificate program, students should be able to:

- Test, repair, certify, and troubleshoot a variety of LANs and fiber optic systems
- Construct, test, and troubleshoot electronic circuits
- Troubleshoot digital circuits
- Solder electronic components on circuit boards

EIC 253	Fiber Optics Certification	1
EIC 259	Lan Certification/Repair/Troubleshooting	1
ELT 106	Fundamentals of DC/AC	4
ELT 146	Digital Devices in Computers	3
ELT 165	Electronic Assembly	3

Total Credit Hours **12**

Electronic Assembly

Students will learn about electronic assembly methods with an emphasis on processes, safety, component recognition, and soldering techniques for both through hole and surface mount components. Students learn how to repair, modify and rework broken or defective printed circuit boards.

Program Learning Outcomes

Upon completion of the Electronic Assembly certificate program, students should be able to:

- Interpret working drawings for various industries
- Troubleshoot digital circuits
- Build, troubleshoot, and repair printed circuit boards

CAD 100	Print Reading for Computer Aided Drafting	3
ELT 106	Fundamentals of DC/AC	4
ELT 146	Digital Devices in Computers	3
ELT 165	Electronic Assembly	3
ELT 266	Advanced Electronic Assembly	3

Total Credit Hours **16**

Robotic Technology

Students will learn to program a robot in a higher-level language to perform various tasks, including the building and interfacing of sensor circuits. Students will also learn about the technologies and equipment used in manufacturing automation and process control. This includes axis configurations, work envelopes, programming, troubleshooting, and maintenance.

Program Learning Outcomes

Upon completion of the Robotic Technology certificate program, students should be able to:

- Program, maintain, and troubleshoot robotic or similar advanced automated systems
- Operate, program, maintain, troubleshoot, and repair Local Area Networks (LANs), fiber optic networks and Programmable Logic Controllers (PLCs)
- Troubleshoot digital circuits
- Construct, test, and troubleshoot electronic circuits
- Operate a variety of industrial control systems including supervisory control and data acquisition (SCADA) systems

EIC 230	Instrument and Process Control II	4
EIC 245	Supervisory Control & Data Acquisition	4
EIC 253	Fiber Optics Certification	1
EIC 259	Lan Certification/Repair/Troubleshooting	1
ELT 106	Fundamentals of DC/AC	4
ELT 146	Digital Devices in Computers	3
ELT 257	Sensors & Transducers	3
ELT 258	Programmable Logic Controllers	3
ELT 267	Introduction to Robotics	1
ELT 268	Robotic Technologies	3

Total Credit Hours **27**

Additional information available on the Robotics & Automation Systems Technology Department website at www.pgcc.edu/degrees-certificates/robotics.

Sign Language Interpreter Preparation

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

The Sign Language Interpreter program will provide you with exceptional knowledge and a skill set that will prepare you to partner with the Deaf community. When you complete the AAS Degree in Sign Language Interpretation you will be prepared for entry-level, pre-certified interpreter/translator employment.

Students must submit a Letter of Intent to the Interpreter Preparation Program. In order to be accepted into the program, students must demonstrate proficiency in American Sign Language by:

1. passing the proficiency test at 80%, or
2. receiving a grade of "B" or above in both ASL 121 and ASL 122.

In addition, program requirements include demonstrated mastery of program skills. Therefore, students must receive a grade of "B" or better in all ASL and IPP courses and at least a "C" in all other general education coursework.

To progress to the Interpreting Internship, students must:

1. satisfy all program requirements with a grade of "B" or better,
2. have completed all general education courses and
3. have an overall G.P.A of a 3.0 or higher.

As of July 2012, the Registry of Interpreters for the Deaf (RID) requires a Bachelor's degree for national certification. PPCC has partnered with Regis University and Sienna Heights for full transfer of the AAS degree for a Bachelor of Applied Science degree. This BAS degree satisfies the RID educational standards for certification.

Contact the Interpreter Preparation Office at 719-502-3200 for more information.

Program prerequisite: College Reading & Writing Literacy, College Quantitative Literacy, or placement scores of ENG 121.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

Program Learning Outcomes

Upon completion of the Sign Language Interpreter Preparation degree program, students should be able to:

- Identify tenets of the Registry of Interpreters for the Deaf Code of Professional Conduct and apply professional practice to various scenarios
- Analyze situation to determine modality most appropriate to client language need (interpret/transliterate)
- Interpret/transliterate for a diverse population (with native and non-native speakers of varying ages, race, gender, education, socio-economic status, and ethnicity)
- Demonstrate preparation and brainstorming skills in preparing for assignments and demonstrate flexibility in adapting to changes that arise during an assignment

- Adjust to the interpreting/transliterating needs of the consumer based on consumer signing style and/or feedback
- Identify and apply team interpreting practices during interactive interpreting scenarios

General Education Courses

ANT 101	Cultural Anthropology: SS3	3
CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
COM 115	Public Speaking	3
ENG 121	English Composition I: CO1	3
MAT 107	Career Math	3
	or	
MAT 120	Mathematics for the Liberal Arts: MA1 or higher	(3)
		<u>15</u>

Additional Required Courses

ASL 123	American Sign Language III	5
ASL 215	ASL Literature	3
ASL 221	American Sign Language IV: AH4	3
ASL 222	American Sign Language V: AH4	3
IPP 121	Aspects of Interpreting I	3
IPP 122	Aspects of Interpreting II	3
IPP 125	Oral Transliterating	2
IPP 131	Text Analysis	3
IPP 132	Interpretation Analysis	3
IPP 145	Deaf People in Society	2
IPP 147	Survey of Deaf Culture	3
IPP 205	Educational Interpreting	4
IPP 207	Specialized & Technical Communication	2
IPP 225	English to ASL Interpreting	3
IPP 227	ASL to English Interpreting	3
IPP 229	Transliterating	3
IPP 235	Advanced Interpreting	4
IPP 279	Interpreter Seminar	3
IPP 281	Internship	5
		<u>75</u>

Total Credit Hours

Certificate

Basic ASL Communication Skills

The ASL certificate is for students who want to broaden their horizons by learning a new language and who plan to use their skills for casual communication as opposed to professional interpreting. ASL is the fourth most used language in the United States and can be a valuable asset in any field that is customer or consumer related. In today's competitive market, every additional skill on your resume places you one step closer to your dream job. This certificate can be a starting point for your new career or can enhance any established degree or profession.

Program Learning Outcomes

Upon completion of the Basic ASL communication Skills certificate program, students should be able to:

- Negotiate a signing environment with an increased repertoire of sign vocabulary used in context
- Perform linguistic and culturally appropriate communication techniques that include introductions, attention getting techniques, attending behaviors, interrupting methods, and turn-taking
- Analyze stereotyping, labeling, and oppression regarding Deaf people and the Deaf community and the impact each has on creating stigma on deaf peoples' lives
- Discuss bilingualism and biculturalism
- Identify different national, state, and local Deaf organizations and their purposes

- Describe state and national interpreter certification requirements
- Explain the seven tenets of the Registry of Interpreters for the Deaf Code of Professional Conduct
- Summarize the roles and responsibilities of interpreters
- Apply the Demand Control-Schema to case studies

ASL 123	American Sign Language III	5
ASL 221	American Sign Language IV: AH4	3
IPP 121	Aspects of Interpreting I	3
IPP 145	Deaf People in Society	2
IPP 147	Survey of Deaf Culture	3
Total Credit Hours		16

Additional information available on the Sign Language Interpreter Preparation Department website at www.pgcc.edu/degrees-certificates/sign-language-interpreter.

Social Services Technician

Certificates

Recommended basic skills courses are

- College Reading & Writing Literacy

This program prepares students to enter the social services career field at the paraprofessional level, or to achieve additional specialized training. The training includes individual casework skills, group skills, case management skills, and family group work skills. Students participate in supervised work experience in various social agencies within the community which often serves as an avenue to obtaining employment.

Social Services faculty recommends that in order to maximize the chances of success, students possess foundational skills in the following areas:

- effective study skills
- basic math skills
- reading and comprehension skills
- working knowledge and application of English skills
- time management and problem-solving skills

Students who want individualized program planning suggestions are encouraged to consult program faculty. Please call 719-502-3300 to schedule an appointment.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

NOTE: To be employed in the social work field it is expected that you will be able to pass background checks. This will include fingerprinting for the Colorado Bureau of Investigation and a Central Registry Inquiry.

Child Welfare

Students will gain generalized knowledge of Social Work to include specific coursework in Child Welfare as well as field experience in a social work internship.

Program Learning Outcomes

Upon completion of the Child Welfare certificate program, students should be able to:

- Develop a social history and assessment of client strengths and initial action plan

- Apply social work values and ethics in the helping relationship, including sensitivity to issues of diversity, spirituality, and welfare policies
- Implement case management plans, including linking clients to needed services

PSY 247	Child Abuse & Neglect	3
SWK 180	Internship I	6
SWK 205	Social Welfare in the U.S.	3
SWK 208	Social Work Case Management	3
SWK 222	Introduction to Social Work Practice	3
Total Credit Hours		18

Gerontological

Students will gain generalized knowledge of Social Work to include specific coursework in the study of the social impact and methodology of working with aging populations. This certificate includes field experience in a social work internship.

Program Learning Outcomes

Upon completion of the Gerontological certificate program, students should be able to:

- Develop a social history and assessment of client strengths and initial action plan
- Apply social work values and ethics in the helping relationship, including sensitivity to issues of diversity, spirituality, and welfare policies
- Implement case management plans, including linking clients to needed services

SOC 237	Sociology of Death & Dying SS3	3
SWK 180	Internship I	6
SWK 205	Social Welfare in the U.S.	3
SWK 208	Social Work Case Management	3
SWK 222	Introduction to Social Work Practice	3
Total Credit Hours		18

Social Services

Students will gain generalized knowledge of Social Work to include specific coursework in sociology as well as the methodology and techniques used in modern Social Work. This certificate includes field experience through a social work internship.

Program Learning Outcomes

Upon completion of the Social Services Technician certificate program, students should be able to:

- Develop a social history and assessment of client strengths and initial action plan
- Apply social work values and ethics in the helping relationship, including sensitivity to issues of diversity, spirituality, and welfare policies
- Implement case management and treatment plans, including linking clients to needed services and case consultation
- Discuss how biological, psychological, social, spiritual, and cultural systems influence human development throughout the lifespan

SOC 101	Introduction to Sociology I: SS3	3
SWK 100	Introduction to Social Work	3
SWK 180	Internship I	6
SWK 201	Human Behavior in the Social Environment I	3
SWK 205	Social Welfare in the U.S.	3
SWK 208	Social Work Case Management	3
SWK 222	Introduction to Social Work Practice	3
Elective		3
Total Credit Hours		27

Students must consult with advisors for selection of elective courses.

Substance Abuse

Students will gain generalized knowledge of Social Work to include specific coursework in Substance Abuse Identification and treatment used in modern Social Work. This certificate includes field experience through a social work internship.

Program Learning Outcomes

Upon completion of the Substance Abuse certificate program, students should be able to:

- Discuss various issues related to working with people who exhibit substance or alcohol abuse
- Develop a social history and assessment of client strengths and initial action plan
- Apply social work values and ethics in the helping relationship, including sensitivity to issues of diversity, spirituality, and welfare policies
- Implement case management plans, including linking clients to needed services

SWK 106	Introduction to Alcohol & Drugs	3
SWK 180	Internship I	6
SWK 205	Social Welfare in the U.S.	3
SWK 208	Social Work Case Management	3
SWK 222	Introduction to Social Work Practice	3
Total Credit Hours		18

Additional information available on the Social Services Technician Department website at www.pgcc.edu/swk.

Surgical Technology

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

The Surgical Technologist is an integral member of the surgical team including the surgeon, anesthesiologist, and nurse to deliver patient care before, during and after surgery. Before an operation, surgical technologist helps prepare the operating room by setting up surgical instruments and equipment. During the surgery, technologist pass instruments and other sterile supplies to surgeons and assistants.

This four-semester program develops the knowledge and skills for an entry level job as a Surgical Technologist. Graduates of this program are prepared to take the national certification examination for surgical technology once accreditation approval from CAAHEP has been received. The curriculum is in alignment with the standards set forth by the Association of Surgical Technologists (AST) core curriculum guidelines.

The surgical technologist can work in a variety of settings including hospitals, surgery departments, obstetric departments, and ambulatory surgery centers.

Program Learning Outcomes

Upon completion of the Surgical Technology degree program, students should be able to:

- Articulate the general characteristics of medical terminology and common use in the healthcare environment, and assign medical terminology as it relates to the whole body
- Identify types and functions of instruments and their uses
- Demonstrate the proper care and handling of surgical instruments
- Describe sterilization methods used in the operating room
- Articulate the concepts of the aseptic technique.
- Apply the correct methods and steps in the aseptic process
- Demonstrate the principles of aseptic technique when opening sterile supplies
- Adapt to the various types of work environments for surgical technologists and maintain professional behavior and appearance in all aspects of the medical field
- Communicate effectively with patients and members of the healthcare team
- Perform all assigned independent duties competently and efficiently as allowed by the state and federal laws

General Education Courses

BIO 201	Human Anatomy & Physiology I with Lab: SC1	4
BIO 202	Human Anatomy & Physiology II with Lab: SC1	4
BIO 204	Microbiology with Lab: SC1	4
ENG 121	English Composition I: CO1	3
	or	
ENG 122	English Composition II: CO2	(3)
	or	
ENG 131	Technical Writing I: CO1	(3)
MAT 103	Math for Clinical Calculations	3
	or	
MAT 107	Career Math	(3)
PSY 235	Human Growth & Development	3
		21

Additional Required Courses

HPR 208	Medical Record Terminology	2
STE 100	Fundamentals of Surgical Technology	6
STE 101	Surgical Technology Skills Lab	4
STE 105	Pharmacology for the Surgical Technologist	2
STE 110	Surgical Procedures I	3
STE 115	Surgical Procedures II	3
STE 120	Surgical Procedures III	3
STE 179	Surgical Technical Seminar	2
STE 181	Internship I	4
STE 182	Internship II	4
STE 183	Internship III	6
		39
Total Credit Hours		60

Veterinary Assistant

Certificate

This program is designed for students wanting to complete a two semester Certificate in Veterinary Assisting and enter the workforce. The Veterinary Assistant certificate program provides training in veterinary health and handling of a variety of domestic animals with the focus on tasks for assisting the Veterinary Technician and Veterinarians to become a part of the veterinary medical team. Completion of all course work is required before the student is eligible for private-practice internship. After successful completion of the program, graduates are eligible to sit for the National Assistant exam to become an Approved Veterinary Assistant (AVA). Please see the NAVTA web page at: https://www.navta.net/page/vet_assistants for more information.

Program Learning Outcomes

Upon completion of the Veterinary Assistant certificate program, students should be able to:

- Demonstrate proper handling and restraint techniques
- Demonstrate appropriate assistance with diagnostic laboratory procedures
- Demonstrate initial assessment procedures for animals
- Identify clinical pharmacology

VET 102	Veterinary Medical Terminology	1
VET 103	Veterinary Assistant Restraint & Handling	2
VET 104	Assistant Large Animal Nursing	1
VET 109	Applied Companion Animal Behavior	3
VET 114	Vet Assistant Lab & Clinical Procedures	3
VET 117	Veterinary Assistant Surgery & Nursing Care	2
VET 120	Office Procedure and Relations	2
VET 183	Internship	2
Total Credit Hours		16

Water Environmental Technology

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Algebraic Literacy

The Water Environmental Technology Program is designed to prepare students for employment at the technician level in water and wastewater treatment operations. The curriculum includes science and math foundations, water and wastewater treatment techniques, field experiences and group projects. Local career opportunities in this ever-growing field will be available to the graduates of this program.

Program Learning Outcomes

Upon completion of the Water Environmental Technology degree program, students should be able to:

- Perform mathematical calculations specific to the water quality industry
- Explain the importance of safety practices in the water and wastewater industry
- Describe the fundamental business practices utilized in managing water or wastewater utilities
- Discuss drinking water regulatory requirements and their implementation
- Define specific terms associated with water quality management
- Prepare, analyze, interpret and report results of water sample testing
- Apply principles of hydraulics and electricity to wastewater management practices
- Effectively communicate current events and advances in the water quality industry
- Define and describe the types, functions, layout of and equipment used in water management facilities (water distribution, water collection, wastewater treatment)

General Education Courses

ENG 121	English Composition I: CO1	3
or		
ENG 131	Technical Writing I: CO1	(3)
ENV 101	Introduction to Environmental Science w/Lab: SC1	4
GEY 111	Physical Geology w/Lab: SC1	4
MAT 121	College Algebra: MA1	4
		<hr/> 15

Additional Required Courses

WQM 100	Introduction to Water Quality	3
WQM 105	Specific Calculations for Water Quality Management	4
WQM 106	Mechanical-Physical Treatment	3
WQM 109	Water Distribution	3
WQM 115	Water Sources & Supplies	3
WQM 116	Conventional Surface Water Treatment	3
WQM 118	Wastewater Collection Systems	3
WQM 119	Basic Water Quality Analyses	4
WQM 120	Water Quality Equipment Maintenance	3
WQM 126	Safety & Security Systems	3
WQM 200	Hydraulics for Water Quality Management	4
WQM 212	Drinking Water Regulations	4
WQM 216	Biological & Bacteriological Water Quality Analysis	4
WQM 280	Internship	3
		<hr/> 48

Total Credit Hours **63**

Certificates**Wastewater Collection & Treatment**

This Wastewater Collection & Treatment certificate is designed to prepare students for work in water and wastewater treatment facilities. Students learn about the calculations associated with water and wastewater treatment, components and design of collection systems, pipeline cleaning and maintenance, safety procedures performed in the water and wastewater industry, preventive maintenance, and repair maintenance of treatment plant equipment.

Program Learning Outcomes

Upon completion of the Wastewater Collection and Treatment certificate program, students should be able to:

- Operate and maintain a variety of water quality equipment
- Enhance treatment effective operations based on mathematical principles and calculations
- Design and implement safety procedures

WQM 105	Specific Calculations for Water Quality Management	4
WQM 106	Mechanical-Physical Treatment	3
WQM 118	Wastewater Collection Systems	3
WQM 120	Water Quality Equipment Maintenance	4
WQM 126	Safety & Security Systems	3
		<hr/> 17

Total Credit Hours **17**

Water Distribution & Treatment

This Water Distribution & Treatment certificate is designed to prepare students for work in water and wastewater treatment facilities. Students learn about the calculations associated with water and wastewater treatment, selection and location of water storage facilities and the operation and maintenance of related equipment, contaminants and degradation inspection and monitoring, disinfection and emergency planning, safety procedures performed in the water and wastewater industry, and preventive maintenance and repair maintenance of treatment plant equipment.

Program Learning Outcomes

Upon completion of the Water Distribution and Treatment certificate program, students should be able to:

- Perform operations, testing, and maintenance requirements for water distribution systems
- Enhance treatment effective operations based on mathematical principles and calculations
- Design and implement safety procedures
- Operate and maintain a variety of water quality equipment

WQM 105	Specific Calculations for Water Quality Management	4
WQM 109	Water Distribution	3
WQM 116	Conventional Surface Water Treatment	3
WQM 120	Water Quality Equipment Maintenance	4
WQM 126	Safety & Security Systems	3
Total Credit Hours		17

Additional information available on the Water Environmental Technology Department website at www.pgcc.edu/water-environmental-technology.

Welding

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

Training in welding is offered to those who wish to learn basic welding skills or to upgrade their knowledge in welding and fabrication. All welding classes are offered on a self-paced basis. Classes use course outlines, books, videos, and instructor-assisted instruction with practical hands-on training. Various types and thicknesses of material are welded in all positions with different welding processes. Courses in ornamental ironwork are also available. The degree program provides students with additional competencies in welding which will enhance their upward mobility.

Students are required to purchase personal protective equipment, tools and textbooks. Students will receive a list of necessary equipment and books during orientation the first day of the course in which they enroll.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

Program Learning Outcomes

Upon completion of the Welding degree program, students should be able to:

- Maintain a safe work environment by understanding and following Welding shop safety requirements
- Read and interpret an industry standard blueprint by generating a part
- Produce a multiple pass t-joint weldment in the 2F position utilizing the (SMAW) Shielded Metal Arc Welding process
- Produce a Stainless Steel t-joint weldment in the 2F position utilizing the (GTAW) Gas Tungsten Arc Welding process

General Education Courses

COM 225	Organizational Communication	3
CSC 105	Computer Literacy	3
MAT 107	Career Math	3
Elective	AAS General Education Elective course	6
		15

Additional Required Courses

WEL 100	Safety for Welders	1
WEL 106	Blueprint Reading for Welders & Fitters	4
WEL 113	Oxyfuel & Plasma Cutting	2
WEL 114	Oxyacetylene Welding	2
WEL 121	Structural Welding I	3
WEL 122	Structural Welding II	3
WEL 124	Gas Tungsten Arc Welding I	4
WEL 125	Introduction to Gas Metal Arc Welding	4
WEL 224	Gas Tungsten Arc Welding II	4
WEL 225	Advanced Gas Metal Arc Welding	4
Elective	Choose twenty-six (26) hours from list below	26
		57

Total Credit Hours**72****Electives**

MAC 101	Introduction to Machine Shop	3
MAC 110	Introduction to Engine Lathe	3
MAC 120	Introduction to Milling Machine	3
MAC 240	CAD/CAM 2D	3
MAC 241	CAD/CAM 2D Lab	3
MAC 252	Practical Metallurgy	3
WEL 180	Internship	4
WEL 200	Advanced CAD/CAM Cutting Process	4
WEL 205	Introduction to Ornamental Iron	4
WEL 230	Pipe Welding I	4
WEL 231	Pipe Welding II	4
WEL 250	Layout & Fabrication	4
WEL 263	Applied Metal Properties	4
WEL 264	Creative Welding	4
WEL 280	Internship	4
WEL 289	Capstone	4

Certificates**Entry Level Welding**

This Entry Level Welding certificate is designed to prepare students for work in a variety of settings using welding and fabrication. Students learn the hazards of welding to health and safety, as well as essential information that they apply to shop safety procedures. Students become familiar with blueprint reading, and acquire the skills needed to set up equipment, make repairs, and use oxyacetylene and plasma arc cutting processes in structural welding. Additionally, students learn welding in all positions and on various joint configurations using the gas tungsten arc welding (GTAW) process and the gas metal arc welding (GMAW) process.

Program Learning Outcomes

Upon completion of the Entry Level Welding certificate program, students should be able to:

- Follow shop safety procedures
- Read and interpret an industry standard blueprint
- Utilize the oxyacetylene and plasma arc cutting processes
- Produce a variety of welds in all positions and joint configurations using Gas Tungsten Arc Welding (GTAW) and Gas Metal Arc Welding (GMAW)

MAT 107	Career Math	3
WEL 100	Safety for Welders	1
WEL 106	Blueprint Reading for Welders & Fitters	4
WEL 113	Oxyfuel & Plasma Cutting	2
WEL 114	Oxyacetylene Welding	2
WEL 121	Structural Welding I	3
WEL 122	Structural Welding II	3
WEL 124	Gas Tungsten Arc Welding I	4
WEL 125	Introduction to Gas Metal Arc Welding	4
Total Credit Hours		26

Gas Metal Arc Welding (GMAW)

This Gas Metal Arc Welding (GMAW) certificate is designed to prepare students for work in a variety of settings using welding and fabrication. Students learn welding in all positions and on various joint configurations using the GMAW (mig) welding process on carbon steel, stainless steel, and aluminum. Student also become familiar with basic metallurgy pertaining to the weldability of metals, structural joints, and safety in the welding industry. Additionally, students learn welding in all positions on carbon steel plate with the GMAW process.

Program Learning Outcomes

Upon completion of the Gas Metal Arc Welding (GMAW) certificate program, students should be able to:

- Identify and adjust welding parameters based on metal thickness
- Produce a single V-groove Gas Metal Arc Weld (GMAW) in various positions on carbon steel in accordance with AWS D1.1 structural steel code

WEL 125	Introduction to Gas Metal Arc Welding	4
WEL 225	Advanced Gas Metal Arc Welding	4
Total Credit Hours		8

Gas Tungsten Arc Welding (GTAW)

This Gas Tungsten Arc Welding (GTAW) certificate is designed to prepare students for work in a variety of settings using welding and fabrication. Students learn welding in all positions and on various joint configurations using the GTAW (tig) welding process on carbon steel, stainless steel, and aluminum. Student also become familiar with basic metallurgy pertaining to the weldability of metals, structural joints, and safety in the welding industry. Additionally, students learn welding in all positions on carbon steel, stainless steel, and aluminum plate and carbon steel pipe with the GTAW process.

Program Learning Outcomes

Upon completion of the Gas Tungsten Arc Welding (GTAW) certificate program, students should be able to:

- Identify and adjust welding parameters based on applicable metallurgy on varying joint configurations
- Produce fillet and groove Gas Tungsten Arc Weld (GTAW) I various positions on different metals

WEL 124	Gas Tungsten Arc Welding I	4
WEL 224	Gas Tungsten Arc Welding II	4
Total Credit Hours		8

Pipe Welding

This Pipe Welding certificate is designed to prepare students for work in a variety of settings using welding and fabrication. Students learn to perform safety inspections, minor repairs, adjust operating parameters, and operate SMAW, GMAW, and FCAW equipment in a variety of positions on plain carbon steel pipe joints. Students learn to evaluate and solve complex welding and fabrication problems and administer hands on training and supervision to other students during assigned fabrication and welding operations.

*Students must complete Entry Level Certificate prior to taking Pipe courses

Program Learning Outcomes

Upon completion of the Pipe Welding certificate program, students should be able to:

- Follow shop safety procedures and perform safety inspections
- Read and interpret an industry standard blueprint
- Utilize the oxyacetylene and plasma arc cutting processes
- Produce multi pass welds with Gas Tungsten Arc Welding (GTAW) and Shielded Metal Arc Welding (SMAW) equipment in various positions
- Adjust operating parameters of various electrodes on Shielded Metal Arc Welding (SMAW) equipment on carbon steel pipe joints

*Entry Level Certificate	26
WEL 230 Pipe Welding I	4
WEL 231 Pipe Welding II	4
Total Credit Hours	34

Shielded Metal Arc Welding (SMAW)

This Shielded Metal Arc Welding (SMAW) certificate is designed to prepare students for work in a variety of settings using welding and fabrication. Students learn about theory and practice in oxyacetylene processes with an emphasis toward AWS welder qualification with mild steel electrode E-7018 welding in the horizontal and vertical position. The goal is to take the AWS welder with mild steel electrode E-7018 qualification test in the 2G, 3GU, and 4G position.

Program Learning Outcomes

Upon completion of the Shielded Metal Arc Welding certificate program, students should be able to:

- Identify and adjust welding parameters based on varying positions
- Produce a single V-groove Shielded Metal Arc (SMAW) weld in various positions on carbon steel in accordance with AWS D1.1 structural steel code

WEL 121	Structural Welding I	3
WEL 122	Structural Welding II	3
Total Credit Hours		6

Additional information available on the Welding Department website at www.pgcc.edu/welding.

Zoo Keeping Technology

Associate of Applied Science Degree

Recommended basic skills courses are

- College Reading & Writing Literacy
- College Quantitative Literacy

This program is designed to prepare students to be zoo keeping technicians and animal care professionals. Classes include training in science foundations, animal husbandry, career development, horticulture, exhibit design and veterinary zoo keeping giving the students the background for a career in the animal care professions.

New students must satisfactorily pass a Criminal Background Investigation (CBI) prior to first internship. Failure to pass may jeopardize participation in any internship. CBI tests are at student expense.

Students should realize that a degree from PPCC will not guarantee a position with a zoo. Many zoos have requirements other than education for employment. Requirements for a zoo keeping job may include the following:

- Ability to remain on feet for long periods of time.
- Working in a variety of weather conditions, weekends, and holidays.
- Work in small, confined spaces.
- Perform a variety of physical tasks that include climbing, bending, stooping, kneeling, twisting, reaching, and crawling.
- Physical strength, including the ability to frequently move fifty (50) pounds.
- Ability to wear Personal Protective Equipment that may include rubber/latex gloves, steel-toed boots/shoes, face shields, eye goggles, and dust masks.
- No allergy related to plants or animals that would impede work.
- No impairment of sight, smell, hearing, touch balance, and ability of movement that might interfere with ability to work.

Students should consult with a program faculty advisor prior to enrolling in this program.

Students not meeting a course prerequisite must have instructor permission to enroll.

Program Learning Outcomes

Upon completion of the Zoo Keeping Technology degree program, students should be able to:

- Determine the science behind animal care, including basic biology and natural history of diverse taxa, based upon their taxonomical organization
- Design a public interpretation program based on research of an assigned animal regarding natural history, biology, captive housing, and conservation
- Evaluate animal welfare through daily observations and husbandry care
- Select and apply proper tool use for assigned task
- Demonstrate oral, non-verbal, and written communication skills

General Education Courses

BIO 103	Principles of Animal Biology: SC2	3
COM 115	Public Speaking	3
	or	
COM 214	Natural Resource Interpretation & Communication	(3)
ENG 131	Technical Writing I: CO1	3
	or	
ENG 121	English Composition I: CO1	(3)
ENV 101	Environmental Science w/Lab: SC1	4
MAT 103	Math for Clinical Calculations	3
	or	
MAT 107	Career Math	(3)
		<u>16</u>

Additional Required Courses

ZOO 101	Introduction to Captive Animal Management	2
ZOO 103	Introduction to Animal Training	2
ZOO 115	Bird Husbandry	4
ZOO 117	Biodiversity & Conservation	3
ZOO 125	Mammal Husbandry	4
ZOO 145	Zoonotic Preventative Medicine	3
ZOO 155	Invertebrate Zoology	4
ZOO 165	Herpetology	4
ZOO 180	Zoo Keeping Internship I	5
ZOO 181	Zoo Keeping Internship II	5
Electives	Choose ten (10) hours from list below	<u>10</u>
		49

Total Credit Hours

65

Electives

OUT 201	Scuba Diving	1
OUT 202	Open Water Diver	1
ZOO 102	Primates: Prosimians & Monkeys	3
ZOO 110	Wild Cats-Conservation & Management	2
ZOO 111	Ungulates-The Hoofed Mammals	2
ZOO 113	Pachyderms: Hippos, Rhinos & Elephants	2
ZOO 114	Wild Canid Conservation & Management	2
ZOO 120	Bats: An Introduction	2
ZOO 122	Primatology: Captive Apes	2
ZOO 200	Advanced Exhibitory Techniques	2
ZOO 203	Animal Training in Action	2
ZOO 255	Aquatic & Terrestrial Invertebrate Husbandry	4
ZOO 265	Reptile & Amphibian Husbandry	4
ZOO 280	Zoo Keeping Internship III	5

Certificates

Mammal Husbandry

The Mammal Husbandry certificate is designed to enhance the Zoo Keeping AAS degree or introduce students to animal careers other than Zoo Keeping. Students learn about the importance of animal conservation programs in ex-situ and in-situ environments throughout the world. Additionally, students learn about mammalian biology and husbandry, and the captive care and management of mammals. Students can choose electives that focus on primates (lesser primates and great apes), wild cats, ungulates, elephants, and bats.

Program Learning Outcomes

Upon completion of the Mammal Husbandry certificate program, students should be able to:

- Discuss the environmental, political, economic, and sociological issues linked to loss of biodiversity on the planet
- Design husbandry, conservation, and management programs for a variety of mammals (e.g., wildcats, primates, hoofed mammals)

ZOO 117	Biodiversity & Conservation	3
ZOO 125	Mammal Husbandry	4
Elective	Choose six (6) hours from list below	<u>6</u>
Total Credit Hours		13

Electives

ZOO 102	Primates: Prosimians & Monkeys	3
ZOO 110	Wild Cats-Conservation & Management	2
ZOO 111	Ungulates-The Hoofed Mammals	2
ZOO 112	Elephants: An Introduction	1
ZOO 120	Bats: An Introduction	2
ZOO 122	Primateology: Captive Apes	2

Zoo Science

The Zoo Science certificate is designed to enhance the Zoo Keeping AAS degree or introduce students to animal careers other than Zoo Keeping. Students learn about the physical and mental demands in the field of zoo keeping, bird biology and husbandry, mammalian biology and husbandry, and fish and aquatic invertebrate biology in relation to captive care and management.

Program Learning Outcomes

Upon completion of the Zoo Science certificate program, students should be able to:

- Design husbandry, conservation, and management programs for mammalian and avian species
- Construct and enrich animal enclosures according to individual animal needs
- Discuss the environmental, political, economic, and sociological issues linked to loss of biodiversity on the planet
- Develop and implement training programs for captive animals

ZOO 101	Introduction to Captive Animal Management	2
ZOO 104	Animal Training	2
ZOO 115	Bird Husbandry	4
ZOO 117	Biodiversity & Conservation	3
ZOO 125	Mammal Husbandry	4
ZOO 206	Exhibit & Horticulture Design for Zoo Exhibits	4
Elective	Choose six (6) hours from list below	<u>6</u>
		40

Electives

BIO 148	Basic Ecology	4
HWE 100	Human Nutrition	3
HWE 103	Community First Aid & CPR	1
HWE 110	Fitness Conditioning & Wellness	2
PSY 100	Psychology of Workplace Relationships	3
ZOO 110	Wild Cats-Conservation & Management	2
ZOO 111	Ungulates-The Hoofed Mammals	2
ZOO 112	Elephants: An Introduction	1
ZOO 120	Bats: An Introduction	2
ZOO 122	Primateology: Captive Apes	2
ZOO 200	Advanced Exhibitory Techniques	2

Additional information available on the Zoo Keeping Technology Department website at www.pccc.edu/degrees-certificates/zoo-keeping-technology.

Bachelor of Applied Science Course of Study

Emergency Service Administration

The BAS Emergency Service Administration degree offers a comprehensive educational program to prepare a new generation of leaders in the field of emergency services in both governmental agencies and private sectors. Students will obtain a well-rounded learning experience and training related to proactive strategic planning for disaster prevention and reduction. The curriculum blends theoretical perspectives with professional practice necessary to enhance resiliency for communities and leverage capabilities and resources to deal with emergency situations. Students will learn how to tackle crisis requiring multi-agency collaboration and coordination activities. Additionally, the curriculum provides the foundation and skills for professionals in emergency services to advance into a leadership position and practice a proactive leadership in unpredictable and catastrophic situations to minimize risk to responders and the public.

Prior to applying for the BAS ESA degree, students must complete an associate degree with a minimum of 60 credits in one of the following degrees or a different associate degree combined with showing evidence of a minimum of 4000 hours of related field experience.

Criminal Justice
Emergency Management & Planning
Emergency Medical Services
Fire Science Technology
Fire Science Wildland
Public Security Management

Program Learning Outcomes

Upon completion of the Emergency Service Administration degree program, students should be able to:

- Apply optimal use of systems and critical thinking in an emergency situation
- Apply the emergency management framework, principles, and body of knowledge to a crisis scenario
- Evaluate professional ethics response in emergency service environments
- Evaluate executive consideration for emergency service situations in relation to scientific, geographic, sociocultural, technological, and systems literacies
- Analyze the geographic configurations of hazards, vulnerabilities, and risks in relation to their impact on sociocultural norms
- Assess evolving technologies, their relevant application to practice, and timely adoption
- Create an institutional impact analysis within a public policy proposal
- Appraise optimal emergency management and leadership characteristics in varying emergency situations

General Education Requirements

BUS 217	Business Communications & Report Writing	3
ENV 110	Natural Disasters: SC2	3
MAT 135	Introduction to Statistics: MA1	3
POS 125	American State & Local Government: SS1	3
SOC 218	Sociology of Diversity: SS3	3
Total Credit Hours		15

Upper Division BAS Course Requirements

ESA 300	Leadership for Emergency Executives	3
ESA 305	Crisis Communication & Public Relations	3
ESA 310	Emergency Public Information & Media Training	3
ESA 315	Elements of Emergency Service Administration	3
ESA 320	Designing Safer Communities: Pre-incident Planning & Risk Analysis	4
ESA 325	Public Policy & Practical Applications in Emergency Services	3
ESA 330	Budget & Planning Fundamentals for Emergency Administrators	3
ESA 400	Personnel Management in Emergency Service Agencies	3
ESA 405	Public Health in Complex Emergencies	4
ESA 410	Terrorism Threat & Risk Analysis	3
ESA 415	Tactical Planning, Response & Recovery	4
ESA 420	Research & Design for Emergency Administration	3
ESA 489	Emergency Service Capstone	6
		45
Total Credit Hours		60
Total Associate Degree Credit Hours		60
Total BAS Degree Credit Hours		120

Additional information available on the Emergency Service Administration Department website at www.pgcc.edu/esa.

Bachelor of Science in Nursing Course of Study

Registered Nurse

The RN-BSN program is designed for Registered Nurses who wish to earn the baccalaureate nursing degree or for current nursing students (dual enrollment) who are enrolled in the Nursing AAS program who wish to earn the baccalaureate nursing degree. Students will examine the role of baccalaureate nursing that embraces excellence, caring, legal and ethical practice, civility, and lifelong learning. The curriculum prepares students to advance in their nursing career by gaining knowledge of current trends in the profession, nursing research, leadership, and healthcare informatics. Students will critique nursing research and learn to disseminate best practice guidelines in the clinical setting. The student's scope of practice will expand beyond individual patient care to the professional nurse's role in health promotion, prevention, and optimal wellness of communities. Students will be challenged to develop clinical reasoning and leadership skills beyond the scope of the ADN level and are prepared for career advancement within the nursing profession.

Students must apply to the RN-BSN program with a completed Associates Degree or Diploma in Nursing and have a current RN license in good standing. Students who are dual enrolled can start BSN classes through an online format. The program has two courses that require a practicum experience.

The RN-BSN program will recognize and transfer in a total of 71.5 block credit hours for the ADN Degree/Diploma and RN license.

Program Learning Outcomes

Upon completion of the RN-BSN degree program, students should be able to:

- Discuss current issues that nurses encounter in the health care environment
- Deliver effective care in various emergency situations
- Support the unique needs of the aging patients

- Discuss the ethical and legal obligations of professional nursing practice
- Promote prevention and optimal wellness of the community
- Use information management systems in the delivery of patient care

General Education Requirements

ENG 122	English Composition II: C02	3
MAT 135	Introduction to Statistics: MA1	3
One (1) GT Pathways History course (HI1)		3
Two (2) GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4)		6
One (1) GT Pathways Social and Behavioral Sciences course (SS1, SS2, SS3)		3
Total Credit Hours		18

Upper Division BSN Course Requirements

NUR 301	Integration into Baccalaureate Nursing Practice	3
NUR 302	Trends in Nursing Practice	3
NUR 303	Nursing Research / Evidence Based Practice	3
NUR 408	Legal & Ethical Issues Related to Professional Nursing Practice	3
NUR 409	Leadership in the Nursing Profession	3.5
NUR 410	Community Health Nursing / Practicum	6
NUR 411	Senior Seminar	3
Total Credit Hours		24.5

Upper Division BSN Elective Requirements

Students must choose six (6) credits from the following list

NUR 304	Informatics / Healthcare Technology	3
NUR 305	Emergency Preparedness	3
NUR 306	Gerontology Nursing	3
NUR 307	Behavioral Health	3
Total RN-BSN Course Credits		

General Education Credit Hours	18
Credit Hours in the RN-BSN Curriculum	30.5
Associate Degree/Diploma & RN License Block Credit Hours	71.5
Total Credit Hours	120

Other Programs and Courses of Study

Para-Professional Education

Associate of Arts or Science Course of Study/ Associate of General Studies Course of Study

Para-professional educators may complete an Associate degree plan of study or pass a school district designated test. Associate degree plans of study in the para-educator related field include the AA Early Childhood Education, AAS Early Childhood Education, AA Elementary Education, AS or AA Psychology, and AA Sociology. Para-professional educators seeking a degree at PPCC should schedule advising with an EDU or ECE faculty advisor, by calling 719-502-3300.

Additional information available on the Education Department website at www.ppcc.edu/edu.

Pre-Engineering

Associate of Science Transfer Track

The transfer track offers students the requisite fundamental engineering sciences background and the strong mathematical foundation necessary for pursuing upper-level classes in engineering. Because of the varied differences of freshman and sophomore level courses needed for specific engineering programs, it is strongly recommended that students plan a program of study with pre-engineering advisors prior to or during the first term of study. The transfer track, while not necessarily resulting in an AS degree, does offer the equivalent of the course work of the first two years of college engineering studies in preparation for transfer to an engineering school. For additional information, please call 719-502-3600.

Secondary Education Teacher Preparation

Associate of Arts or Science Course of Study

Secondary Education Teacher Preparation allows students to complete a transferable associate of arts or science degree preparing them for transfer to a four-year college or university in Colorado where they can complete their Bachelor's degree and teaching credential in two additional years. Students identify a major and transfer institution prior to enrolling for courses and must meet with their faculty advisor before registering for classes to insure transferability of courses to their chosen institution/major. Areas of Certification in Colorado are Art, Communication, Drama, English Language Arts, World Language, Health, Mathematics, Music, Physical Education, Science, and Social Studies. For additional information, please contact PPCC's Advising and Testing department.

Additional information available on the Education Department website at www.ppcc.edu/edu.

COURSE DESCRIPTIONS

Course Numbering System

Each course has a letter and a numeric code. The letters are an abbreviation for the subject. For instance, MAT indicates a mathematics course and ENG an English course.

Courses numbered 100-199 are usually considered freshman level. Sophomore courses are generally numbered between 200 and 299.

Course numbers and descriptions are subject to change.

Developmental Courses

Developmental courses are numbered from 001 to 099. These are courses that teach basic skills often required to complete other college work. Students may be referred to these courses if their placement test scores do not meet college minimum standards. Though developmental courses may be required to enter a program or enroll in other courses, they do not count toward a degree or certificate.

Independent Study

Independent study classes allow students to develop specialized course goals working independently with an instructor. In this type of class, students meet in person with an instructor and agree to an appropriate course of study to conduct an independent investigation of a problem. One credit hour is awarded for each two hours of contracted special study per week per semester. Enrollment requires approval of the appropriate division director and the chief instructional officer.

Off Campus Courses

Courses that originate at PPCC campuses and include travel to off-campus locations are considered by the institution to be resident courses.

Selected Topics

These courses are available in all disciplines under the 175, 177, 176, 275, 276, 277 series. Developmental courses are 075, 076, 077. These courses meet temporary or special requirements for offerings not in the curriculum and explore the viability of adding the proposed course to the curriculum.

State-Guaranteed Curriculum

The State – Guaranteed Curriculum is a package of courses which will transfer to all public colleges and universities in Colorado (except School of Mines). The core package is part of the associate of arts and associate of science degrees. When transferred as a package, core courses will satisfy the lower division general education requirements for Bachelor of Arts and Bachelor of Sciences degrees provided they are completed with a grade of C or better.

Work Experience Courses

These courses are designed to improve employability and to expand the laboratory or shop capabilities of the institution through the use of community-based facilities. All work (field) experience courses include the following:

- an instructor credentialed in the program area to supervise the off-campus instruction
- activities designed by the instructor

- student attendance at a minimum of one class session per week with the instructor
- a training plan which includes assignments required for completion of the course
- grading according to the established college grading policy
- the same types of assignments and preparation as for on-campus courses.

Accounting Courses

ACC 101 Fundamentals of Accounting

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 112 or higher (Grade C or higher) or concurrent enrollment

Introduces accounting fundamentals with emphasis on the procedures and practices used in business organizations. Major topics include the accounting cycle for service and merchandising companies, including end-of-period reporting.

ACC 115 Payroll Accounting

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ACC 101 (Grade of C or higher) or concurrent enrollment, or ACC 121 (Grade of C or higher) or concurrent enrollment

Covers federal and state employment laws and their effects on personnel and payroll records. The course is non-technical and is intended to give students a practical working knowledge of the current payroll laws and actual experience in applying regulations, including computerized payroll procedures.

ACC 121 Accounting Principles I

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy, MAT 112 or higher (Grade C or higher) or concurrent enrollment

This course introduces accounting principles for understanding the theory and logic that underlie procedures and practices for business organizations. Major topics include the accounting cycle for service and merchandising companies, internal control principles and practices, notes and interest, inventory systems and costing, and plant and intangible asset accounting.

ACC 122 Accounting Principles II

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ACC 121 (Grade of C or higher)

This course continues the application of accounting principles to business organizations. Major topics include corporate equity and debt financing, investments, cash flow statements, financial analysis, budgeting, cost and managerial accounting.

ACC 125 Computerized Accounting

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ACC 101 (Grade of C or higher) or concurrent enrollment, or ACC 121 (Grade of C or higher) or concurrent enrollment,

Introduces the capabilities of computer applications in accounting. Includes solving accounting problems of a financial nature and hardware and software controls.

ACC 131 Income Tax

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ACC 101 (Grade of C or higher) or ACC 121 (Grade of C or higher)

Introduces basic concepts of federal income taxation and tax administration with emphasis on taxation of individuals and sole proprietorships.

ACC 132 Tax Help Colorado

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: ACC 101 or ACC 121 recommended, but not required

Examines the preparation of individual, federal, and state income tax returns within the guidelines and limitations set forth by the Tax Help Colorado program and IRS guidelines.

ACC 133 Tax Help Colorado Practicum

1 Credit Hour • 30 Contact Hours (Practicum)

Prerequisite: ACC 132 (Grade of C or higher) or concurrent enrollment

Utilizes income tax knowledge and training in the context of a community service setting. Volunteers prepare individual federal and state income tax within the parameters of the Tax Help Colorado program and Internal Revenue Service (IRS) guidelines.

ACC 135 Spreadsheet Applications for Accounting

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ACC 122 (Grade of C or higher), CIS 155 (Grade of C or higher)

This course introduces spreadsheets as an accounting tool. Using an accounting perspective, the student applies fundamental spreadsheet concepts. The spreadsheet is used as a problem solving and decision-making tool.

ACC 211 Intermediate Accounting I

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ACC 122 (Grade of C or higher)

Focuses on comprehensive analysis of generally accepted accounting principles (GAAP), accounting theory, concepts and financial reporting principles for public corporations. It is the first of a two-course sequence in financial accounting and is designed primarily for accounting and finance majors. Focuses on the preparation and analysis of business information relevant and useful to external users of financial reports. Explores the theories, principles and practices surveyed in Accounting Principles and critically examines "real-world" financial analysis and reporting issues.

ACC 212 Intermediate Accounting II

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ACC 211 (Grade of C or higher)

Focuses on the theoretical and practical aspects of accounting for long-term liabilities, stockholders' equity, investments, pensions, and leases. Includes income tax allocation, financial statement analysis, cash flow statements, and accounting methods changes.

ACC 216 Governmental & Not-for-Profit Accounting

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ACC 122 (Grade of C or higher)

Addresses concepts of budgetary control as a matter of law and public administration theory. Accounting principles and procedures necessary to implement budgetary controls for governmental units and other not-for-profit institutions and organizations are presented.

ACC 226 Cost Accounting

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ACC 122 (Grade of C or higher)

Course covers cost accumulation methods and reports including job order, process, standards, and activity-based cost systems associated with budgeting, planning, and control of costs.

ACC 231 Business Taxation

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ACC 131 or ACC 132; ACC 133 or concurrent

enrollment

Introduces student to taxation of business entities and transactions. Topics include taxation of property transactions, various tax issues that apply to different tax entities, tax administration and practice, and the taxation effects of formation, operation, and dissolution of corporations, partnerships, S corporations, trusts and estates.

ACC 287 Cooperative Education

3 Credit Hours • 135 Contact Hours (Work Experience)

Note: Must have faculty consent to enroll

For Accounting majors only

Provides an opportunity to gain practical experience in applying occupational skills and/or to develop specific skills in a practical work setting. The instructor works with the student to select an appropriate work site, establish learning objectives, and coordinate learning activities with the employer or work site supervisor. For Accounting majors only.

Advancing Academic Achievement Courses

AAA 101 College 101: Student Experience

1 Credit Hour • 15 Contact Hours (Lecture)

Grading: P/F only

Introduces students to college culture and prepares them for the challenges they will face in higher education. Through a series of interactive seminars, students discover learning in a multicultural environment and use college and community resources to attain education and career goals.

AAA 109 Advanced Academic Achievement

3 Credit Hours • 45 Contact Hours (Lecture)

Examines theories and practices associated with successful learning to enhance college success. Techniques covered include academic proficiency, personal management, effective collegiate communication, critical and creative thinking, development of community, awareness of diverse identities, and educational and career planning.

Agriculture Crops & Soils Course

AGY 240 Introductory Soil Science: SC1

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Focuses on formation, physical properties, chemical properties, and management of soils emphasizing conditions that affect plant growth.

American Sign Language Courses

ASL 121 American Sign Language I

5 Credit Hours • 75 Contact Hours (Lecture)

Exposes the student to American Sign Language. Readiness activities are conducted focusing on visual/receptive skills and basic communication. Utilizes the direct experience method. Students must complete this course with a grade of B or higher or pass the ASL proficiency test with a score of at least 80% or better prior to registering for ASL 122 if planning to enroll in the Interpreter Preparation Program.

ASL 122 American Sign Language II

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: ASL 121 (Grade of B or higher) or passing the ASL 121 proficiency exam

Develops a basic syntactic knowledge of American Sign Language (ASL), basic vocabulary, and basic conversational skills. Incorporates vital aspects of deaf culture and community. The direct experience method is used to enhance the learning process. Students must complete this course with a grade of B or higher or pass the ASL 121 proficiency test at 80% or better prior to

acceptance into the Interpreting and Transliterating Preparation program.

ASL 123 American Sign Language III

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: ASL 122 (Grade of B or higher) or passing the ASL 122 proficiency exam

Provides the student an opportunity to develop a stronger grasp of American Sign Language (ASL), as well as the cultural features of the language. ASL vocabulary is also increased. The direct experience method is used to further enhance the learning process. This course is a continuation of ASL 122 with more emphasis on expressive skills in signing.

ASL 125 Fingerspelling

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 122

Provides the student an opportunity to develop expressive and receptive fingerspelling through various class activities.

ASL 135 Conversational ASL

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: ASL 123 (Grade of C or higher)

Provides the student an extended opportunity to develop a strong grasp of American Sign Language (ASL) as well as the cultural features of the language. It helps the student maintain sign language skill. This course is designed for students who have not met the minimum requirements to continue with ASL 221.

ASL 215 ASL Literature

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 221 (Grade of B or higher)

Provides the student with an opportunity to recognize the impact of Deaf Culture on emerging ASL Literature. Covers non-fiction, fiction, poetry, and drama depicted in readings and videotapes related to everyday lives of Deaf people. Develops insight and appreciation of Deaf literature and its implications for Deaf education.

ASL 221 American Sign Language IV: AH4

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 123 (Grade of B or higher)

Continues to provide further study of American Sign Language (ASL) and its grammar, syntax, and cultural features. This course helps develop intermediate-level competency and fluency in the language, and addresses variations in ASL.

ASL 222 American Sign Language V: AH4

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 221 (Grade of B or higher)

Focuses on increasing advanced intermediate-level proficiency in understanding and using American Sign Language (ASL).

Anthropology Courses

ANT 101 Cultural Anthropology: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines the study of human cultural patterns, including communication, economic systems, social and political organizations, religion, healing systems, and cultural change.

ANT 107 Introduction to Archaeology: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces the science of recovering the human prehistoric and historic past through excavation, analysis, and interpretation of material remains. The course provides a survey of the archaeology of different areas of the Old and New Worlds, the works of selected archaeologists, and major archaeological theories.

ANT 111 Biological Anthropology with Laboratory: SC1

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Reading & Writing Literacy

Focuses on the study of the human species and related organisms, and examines principles of genetics, evolution, anatomy, classification, and ecology, including a survey of human variation and adaptation, living primate biology and behavior, and primate and human fossil evolutionary history.

ANT 207 Human Prehistory

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Survey current archaeological and paleoanthropological knowledge of human prehistory from the earliest hominins to the civilizations of the Old and New Worlds. Explore the interrelatedness of biological and cultural attributes in earlier hominin evolution. Examine phylogenetic controversies such as the multiregional vs. replacement models on later hominin evolution. Analyze competing hypotheses concerning the Neolithic and Urban revolutions.

ANT 212 Introduction to Forensic Anthropology w/Lab: SC1

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Reading & Writing Literacy

Covers the basic principles of forensic anthropology, an applied field within the discipline of biological anthropology. The course includes the study of the human skeleton, practical application of biological anthropology and archaeology, and judicial procedure, as they relate to the identification of human remains within a medico-legal context.

ANT 215 Native Peoples of North America: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Studies the origins of native peoples in the New World, through the development of geographic culture areas, to European contact and subsequent contemporary Native American issues.

ANT 218 Archaeology of the Bible

3 Credit Hours • 45 Contact Hours (Lecture)

Examining the early civilizations and major cities described in the Bible, this course is designed to use the methods and critical examination of archaeology. Students will explore the cultural history of the Near East from the Neolithic period to the end of the Iron Age. Students will focus on the Old Testament starting with the domestication of plants and animals in the Neolithic, followed by the development of villages, and then by cities in Israel, Babylon and Egypt.

ANT 221 Exploring Other Cultures I

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Provides an anthropological understanding of a selected culture. Areas of study include the culture's language, processes of enculturation, subsistence patterns and economics, kinship and descent, political organization, religion, art, history, and its reactions to the forces of globalization.

ANT 222 Exploring Other Cultures II

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ANT 221

Provides an anthropological understanding of another selected culture (continuation of ANT 221) with a more in-depth treatment. Areas of study include the culture's language, processes of enculturation, subsistence patterns and economics, kinship and descent, political organization, religion, art, history, and its reactions to the forces of globalization.

ANT 225 Anthropology of Religion: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Explores the culturally universal phenomenon of religion including cross-cultural varieties of beliefs in the supernatural and the religious rituals people employ to interpret and control their worlds.

ANT 250 Medical Anthropology: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Explores the basic principles of medical anthropology, an applied field within the discipline of cultural anthropology including the cross-cultural study of illness, health, healing, death, globalization, and the interaction of the medical systems between cultures.

ANT 255 Anthropology of Energy

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Questions of energy production and consumption occupy a central role in national and global debates. Where does the majority of our energy currently come from, and where should it come from in the future? What is at stake in our energy lifestyles on both local and global scales?

ANT 260 Sex, Gender & Culture

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Explores the anthropology of gender including the relationship between biology and culture in human evolution, archaeological evidence of gender distinctions in prehistory, cross-cultural constructions of masculinity, femininity, and sexuality, variations in the sexual division of labor and economic stratification, gender differences in ritual and religion, and the impact of gender issues in contemporary global culture change.

Arabic Courses**ARA 111 Arabic Language I**

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the Arabic language.

ARA 112 Arabic Language II

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: ARA 111 (Grade of C or higher)

Continues Arabic Language I in the development of functional proficiency in listening, speaking, reading, and writing the Arabic language. This course is conducted predominantly in Arabic.

ARA 211 Arabic Language III

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ARA 112

Continues Arabic Language II in the development of increased functional proficiency at the intermediate level in speaking, aural comprehension, reading, writing, and cultural competency in the Arabic language. This course is conducted predominantly in Arabic.

ARA 212 Arabic Language IV

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ARA 211 (Grade of C or higher)

Continues Arabic Language III in the development of increased functional proficiency at advanced level in, speaking, aural comprehension, reading, writing, and cultural competency in the Arabic language.

Architectural Engineer/Construction Management Courses**AEC 102 Residential Construction Drawing**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: AEC 104, AEC 107, CAD 104

Covers an investigation of light frame construction techniques and the production of residential construction drawings. The course covers residential construction materials, components and systems related to wood frame structures. Students produce a professional set of construction drawings of a residential structure.

AEC 104 Architectural Drawing Theory

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: CAD 104 or concurrent enrollment

Print reading, construction assemblies, terminology, isometric drawings, orthographic projections, and oblique sketching.

AEC 107 Print Reading Residential/Commercial

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAR 104 or AEC 104 or concurrent enrollment

Interpret construction prints and the related documents produced by the residential or commercial architect and used in the construction industry.

AEC 121 Construction Material & Systems

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: AEC 104, AEC 107

Examines building materials and construction techniques. Topics include a study of soils, concrete, brick, masonry, steel, timber, and plastics and a study of types of building structural systems and components. Principles of interpreting light commercial construction drawings (blueprints) for structural and trade information are also introduced.

AEC 122 Construction Practices & Documents

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: AEC 102, AEC 104, AEC 107, CAD 104

Investigates construction practices, specifications, contracts and other legal documents used in the building construction industry. The roles and responsibilities of design and construction team participants are also explored.

AEC 123 Commercial Construction Drawing

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: AEC 102, AEC 104, CAD 104

Examines the process of drawing commercial architectural plans, elevations, sections, details, and schedules. Students produce a portfolio of construction drawings of a multistory core and shell of a structure.

AEC 125 History of Architecture

3 Credit Hours • 45 Contact Hours (Lecture)

This course will cover major periods of architectural development. Social and cultural values influencing architecture will be highlighted as well as the interaction of art, engineering and architecture as forms of expression.

AEC 216 Construction Estimating

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: AEC 107, AEC 121 or CAR 104, CIS 118**Note: Advisor approval required*

Covers basic construction estimating. The student will develop skills in estimating the amount and cost of various constructions. He/She will demonstrate these skills by making estimates of material and labor quantities and cost for representative types of construction.

AEC 218 Sustainable Building Systems

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: AEC 102, AEC 104, AEC 107, AEC 121

Investigates the technologies and strategies related to sustainable (green) materials and systems for buildings. Topics include: energy and environmental consciousness/regulations; the high-performance building envelope; alternative construction techniques (adobe, cob, rammed earth, straw bale); microclimate/site factors; sustainable/green materials; and passive solar; active thermal solar, photovoltaic energy, wind energy conversion, on site water use/reuse and waste disposal systems.

AEC 225 Architectural Design & Development

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: AEC 102, AEC 121, AEC 123, AEC 218, CAD 224

Reviews conceptual design, site analysis, and architectural drafting techniques. Students will be introduced to the development of design ideas and theories and learn how to present those ideas visually. Students will be required to analyze a site and produce a design solution that responds to that particular site through a combination of research data, conceptual models, drawings, and sketches. The student will produce a final presentation of all relevant data, sketches, conceptual models, and drawings using presentation boards produced in various graphical programs.

AEC 226 Construction Scheduling

3 Credit Hours • 52.5 Contact Hours (30 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: AEC 107, AEC 216, AEC 121 or CAR 104

Students will research various methods of project scheduling. Emphasis will be placed on critical path method techniques and strategies.

AEC 232 Construction Project Management

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: AEC 102, AEC 121, AEC 216, AEC 226, AEC 236, CAD 104, CAD 224

Investigates building construction management principles including a study of systematic scheduling techniques, project tracking and control methods, and budget and cost analysis and control.

AEC 233 Construction Safety & Loss Prevention

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: AEC 104, AEC 107, AEC 121 or concurrent enrollment

Explores construction site hazards and unsafe practices, related health and safety regulations and standards, and loss and theft prevention. Training in basic first aid and CPR is included.

AEC 236 International Building Codes

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: AEC 102 and AEC 121, or AEC 107 and CAR 104

A study is made of the restrictions, standards, and requirements that in the interest of public safety and welfare have been established by law to govern the construction of buildings and their materials. Specifications are developed to describe building materials to be furnished and how they are to be installed.

AEC 255 Professional Workplace Skills & Presentation

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: AEC 123, AEC 225 or concurrent enrollment, AEC 232 or concurrent enrollment, CAD 224

Implements workplace tools and skills of the architecture profession and construction industry. Includes instruction on developing a resume and design portfolio in a visually artistic and professional manner. The course will also include lessons in

workplace, customer and client relations, teambuilding, participation, and employer expectations.

AEC 280 Internship

3 Credit Hours • 135 Contact Hours (Internship)

Note: Must have faculty consent to enroll

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

Art Courses**ART 110 Art Appreciation: AH1**

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology.

ART 111 Art History Ancient to Medieval: AH1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Provides the knowledge base to understand the visual arts, especially as related to Western culture. This course surveys the visual arts from the Ancient through the Medieval periods.

ART 112 Art History Renaissance to 1900: AH1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Provides the knowledge base to understand the visual arts, especially as related to Western culture. This course surveys the visual arts from the Renaissance to 1900.

ART 113 History of Photography

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Surveys the history of photography from its beginnings to the present. Emphasizes individual photographers who have made significant contributions to the field. Includes technical, artistic, commercial, and social development of photography as a form of visual communication.

ART 114 Art Sampler

1 Credit Hour • 22.5 Contact Hours (7.5 Lecture, 15 Lab)

Introduces students to basic skills through various art media. This course may be repeated under a different subtitle for a maximum of six Credit Hours. Encompasses a multitude of one-credit art experiences that expose students to an art form that they may wish to explore further.

ART 115 Stained Glass I

3 Credit Hours • 90 Contact Hours (Studio)

Develops a basic understanding and approach to stained glass. Students gain an understanding of and appreciation for the properties of glass and the nature of finished stained glass construction.

ART 116 Stained Glass II

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 115

A continuation of Stained Glass I, students advance to a clearer but still basic understanding and approach to stained glass. Students gain a greater understanding of and appreciation for the properties of glass and the nature of finished stained glass construction.

ART 117 Fiber Design I

3 Credit Hours • 90 Contact Hours (Studio)

Introduces basic fiber design. Explores basic studies and approaches to fiber design, ranging from the uses of dyes, prints,

painting, and threads to an appreciation of the properties of various kinds of fiber and textiles.

ART 118 Weaving Techniques Southwest I

3 Credit Hours • 90 Contact Hours (Studio)

Introduces traditional Southwest weaving. Focuses on building a loom, carding raw wool, hand spinning, dye baths, and actual rug weaving. Explores Southwest history and culture as related to weaving.

ART 119 Weaving Techniques Southwest II

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 118

Continues the focus on traditional Southwest weaving. Emphasizes building a loom, carding raw wool, hand spinning, dye baths, and actual rug weaving. Explores Southwest history and culture as related to weaving.

ART 121 Drawing I

3 Credit Hours • 90 Contact Hours (Studio)

Investigates the various approaches and media that students need to develop drawing skills and visual perception.

ART 122 Drawing for the Graphic Novel

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 121 and ART 128 recommended, but not required

Introduces the drawing and fine art principles used in developing illustrations for the graphic novel. Students explore the graphic novel as a vehicle for a unique, personal venue for artistic expression. Students explore the history of the graphic novel as well as examine different artistic styles used in the development of graphic novel illustrations. The application of artistic concepts in the creation of an individual graphic work and thorough examination of course material in terms of style, design considerations and visual elements are the primary focus. Students will create images for a graphic novel, focusing on unity of style and techniques for creating images appropriate to story line using black and white or grayscale illustrations.

ART 124 Watercolor I

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 121 recommended, but not required

Provides an introduction to the basic techniques and unique aspects of materials involved in the use of either transparent or opaque water media or both. Color theory is included.

ART 127 Landscape Drawing I

3 Credit Hours • 90 Contact Hours (Studio)

Emphasizes nature, particularly landscape. Drawing outside or in view of landscape using graphite, ink, prisma-color, pastel, and washes. Students concentrate on various approaches, viewpoints, and styles and acquire expertise and interpretation in a variety of media.

ART 128 Figure Drawing I

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 121 recommended, but not required

Introduces the basic techniques of drawing the human figure.

ART 129 Printmaking I

3 Credit Hours • 90 Contact Hours (Studio)

Introduces the basic techniques and skills of printmaking as a fine art media. Instruction includes an understanding of visual concepts as they relate to prints. May include introduction to relief, intaglio, lithography, and screen-printing techniques.

ART 131 Visual Concepts 2-D Design

3 Credit Hours • 90 Contact Hours (Studio)

Examines the basic elements of design, visual perception, and artistic form and composition as they relate to two-dimensional media.

ART 132 Visual Concepts 3-D Design

3 Credit Hours • 90 Contact Hours (Studio)

Note: ART 132 is not computer-based

Focuses on learning to apply the elements and principles of design to three dimensional problems.

ART 133 Jewelry & Metalwork I

3 Credit Hours • 90 Contact Hours (Studio)

Introduces the construction of jewelry designs in metals and small casting techniques.

ART 137 Enameling on Metal I

3 Credit Hours • 90 Contact Hours (Studio)

Introduces the techniques, history, application, and potentials of glass fused to metal at high heat in greater depth than in the 1 credit enameling course. Individual studio projects explore the brilliance of glass and the versatility of metals in enameling. Formal critiques accompany each project so that students experience and profit from instructor comment and peer comment.

ART 138 Film Photography I

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces black and white photography as a fine art medium and develops skills necessary for basic camera and lab operations.

ART 139 Digital Photography I

3 Credit Hours • 45 Contact Hours (Lecture)

Presents the fundamentals of Fine Art digital photography, including camera equipment and software used for image capture, management and manipulation. Topics include camera settings and exposure control, composition, working with light and time, and creative image manipulation.

ART 142 Landscape Photography

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Prerequisite: ART 139 (Grade of B or higher) or PHO 120 (Grade of B or higher)

Focuses on traditional and contemporary approaches to landscape photography. Examines technical and aesthetic aspects of landscape photography through group discussions, a field study, lectures, and print and slide critiques.

ART 144 Portrait Photography

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Prerequisite: ART 139 or PHO 120

Teaches the technical and aesthetic aspects of studio and location portrait photography. This course explores the personal style of portraiture, history of the field and portraiture as a visual language and creative expression. This topic also includes lighting, composition, posing, and equipment selection.

ART 149 Mixed Media I: Digital Art

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Introduces students to the design and creation of fine-art composites that involve the combinations of techniques, texture, drawing, painting, photography, and objects, and emphasizes the computer as an art tool. In addition to incorporating technology-based vocabulary as it relates to fine-art technique, vector and raster applications are explored for the creation of montage and collage. No computer experience is necessary.

ART 150 Digital Art Foundations I

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)
 Explores visual problem solving using digital tools for fine art. Students will learn to draw and paint in a variety of artistic modalities using color and grayscale. Two-dimensional to three-dimensional observation exercises in composition will be explored. Students will develop their skills in gesture and contour drawing, painterly expression and artistic elements while using the computer as an art tool. Use of systematic applications for development and presentation of ideas is practiced using vector and raster software. No computer experience is necessary.

ART 151 Painting I

3 Credit Hours • 90 Contact Hours (Studio)
Prerequisite: ART 121 and ART 230 recommended, but not required
 Explores basic techniques, materials, and concepts used in opaque painting processes in oil or acrylic painting to depict form and space on a two-dimensional surface.

ART 152 Landscape Painting

3 Credit Hours • 90 Contact Hours (Studio)
 Focuses on specific landscape concerns in the painting media of your choice.

ART 153 Pastel Painting

3 Credit Hours • 90 Contact Hours (Studio)
 Approaches the pastel medium in an inventive manner and introduces students to soft pastels and their many approaches to painting with them. Color theory will be taught in practice and application.

ART 154 Figure Painting I

3 Credit Hours • 90 Contact Hours (Studio)
 Focuses on painting the human figure, and includes a brief survey of figure painting and instruction in the fundamental methods of composition and expressions.

ART 155 Portraiture

3 Credit Hours • 90 Contact Hours (Studio)
 Introduces portrait drawing using various media, such as pencil, charcoal, pastel, and watercolor. Head and hand structures and their individual features and composition (using art elements and principles) are emphasized.

ART 161 Ceramics I

3 Credit Hours • 90 Contact Hours (Studio)
 Introduces traditional and contemporary ceramic forms and processes including hand building and throwing on the potter's wheel.

ART 162 Handbuilt Clay I

3 Credit Hours • 90 Contact Hours (Studio)
 Provides instruction in several methods of hand building and the study of functional and decorative design elements.

ART 163 Handbuilt Clay II

3 Credit Hours • 90 Contact Hours (Studio)
Prerequisite: ART 162
 Provides continued instruction in various methods of hand building.

ART 164 Handbuilt Clay III

3 Credit Hours • 90 Contact Hours (Studio)
Prerequisite: ART 163
 Covers advanced problems with importance placed on large scale pieces that promote creativity with techniques and combinations of different textures.

ART 165 Sculpture I

3 Credit Hours • 90 Contact Hours (Studio)
Prerequisite: ART 132 recommended, but not required
 Introduces the fundamentals of sculpture such as modeling, casting, carving, and the processes of assemblage.

ART 166 Raku

3 Credit Hours • 90 Contact Hours (Studio)
Prerequisite: ART 161 or ART 162
 Studies the Japanese art of Raku pottery. Students may hand build or make wheel thrown pots and will be involved in the unique firing process.

ART 167 Sculpting the Figure

3 Credit Hours • 90 Contact Hours (Studio)
 Focuses on sculpting the human figure using modeling techniques in clay.

ART 207 Art History 1900 to Present: AH1

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: College Reading & Writing Literacy
 Introduces the concepts necessary to understand modern visual art, with an emphasis on world art of the 20th century. This course surveys world art of the 20th century, including Modernism to Post-Modernism.

ART 208 Culture Studies

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)
 Studies the arts and history of a particular culture at the location of that culture. Students view the arts and architecture of the culture in the historical and spatial contexts for which they were designed and in galleries and museums.

ART 209 Studio Art

3 Credit Hours • 90 Contact Hours (Studio)
 Designed for advanced students interested in further exploring an art discipline to develop a more comprehensive portfolio.

ART 210 Marketing for Visual Arts

3 Credit Hours • 45 Contact Hours (Lecture)
 Provides students with the framework, tools, and professional materials necessary for the practicing visual artist. Guidelines for writing proposals, artist's statements, and resumes are discussed and practiced. Explores theoretical and practical considerations related to portfolio presentation and exhibiting artwork through hands-on activities, readings, and discussion.

ART 211 Business of Visual Art

3 Credit Hours • 45 Contact Hours (Lecture)
 Introduces students to the principles and practices involved in creating and operating arts organizations in the profit and not-for-profit art world.

ART 215 Stained Glass III

3 Credit Hours • 90 Contact Hours (Studio)
Prerequisite: ART 116
 Provides continued instruction in which students advance to a clearer and more advanced understanding and approach to stained glass. Students gain a greater understanding of and appreciation for the properties of glass and the nature of finished stained glass construction. Emphasizes original, personal expression.

ART 216 Stained Glass IV

3 Credit Hours • 90 Contact Hours (Studio)
Prerequisite: ART 215
 Continues instruction in stained glass with students advancing to a clearer understanding and approach. Students gain greater appreciation for the properties of glass and the nature of finished stained glass construction. Focuses on original, personal expression. Student independence is emphasized with regard to use of material and tools and a wide variety of glass.

ART 217 Fiber Design II

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 117

Continues instruction in fiber design (ART 117, Fiber Design I).

ART 218 Weaving Techniques Southwest III

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 119

Provides continued study of Southwest weaving techniques with emphasis on the creation of a woven rug utilizing an original design based on the traditional artistic elements portrayed in Southwest history and culture.

ART 219 Weaving Techniques Southwest IV

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 218

Continues Southwest Weaving with emphasis on creating a Southwest Rug based on an original design.

ART 221 Drawing II

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 121

Explores expressive drawing techniques with an emphasis on formal composition, black and white and color media, and content or thematic development.

ART 222 Drawing III

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 221

Offers a continued study of expressive drawing techniques and development of individual style, with an emphasis on composition and technique variation.

ART 223 Drawing IV

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 222

Explores advanced drawing problems with an emphasis on conceptual development and portfolio and/or exhibition quality presentation.

ART 224 Watercolor II

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 124

Continues the study of watercolor techniques, emphasizing original compositions and experimentation with materials. Color theory is included.

ART 225 Watercolor III

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 224

Concentrates on the advanced study of subject development, form, color, and theme in watercolor.

ART 226 Watercolor IV

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 225

Concentrates on the advanced study of techniques, individual style or expression, and consistency of compositional problem solving in watercolor.

ART 227 Landscape Drawing II

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 127

Focuses on drawing outdoors or in view of landscape (both rural and inner city) using graphite, ink, washes, pencils, pastels, and watercolor. Students concentrate on various approaches, viewpoints, and styles and acquire expertise in a variety of media. Each student presents finished pieces matted for critique.

ART 228 Advanced Figure Drawing

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 128

Provides continuing study of the various methods of drawing the human figure, with emphasis on the description of form and individual style.

ART 229 Printmaking II

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 129

Introduces more advanced techniques and skills of printmaking as a fine art media. Instruction includes an understanding of visual concepts as they relate to prints. May include introduction to relief, intaglio, lithography, and screen printing techniques.

ART 230 Color Theory

3 Credit Hours • 90 Contact Hours (Studio)

Explores the properties and concepts of color for application in fine art, commercial art and/or applied arts using various traditional fine art techniques and materials.

ART 232 Advanced Visual Concepts 3-D Design

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 132

Provides continued study of the principles and elements of three-dimensional design with an emphasis on visual communication for further application in fine art, commercial art, and/or applied arts.

ART 233 Jewelry & Metalwork II

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 133

Emphasizes conceptual design development using casting and specialized techniques.

ART 234 Jewelry & Metalwork III

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 233

Focuses upon advanced work and emphasizes experimentation with materials and techniques, individual designs, and superior craftsmanship.

ART 235 Jewelry & Metalwork IV

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 234

Provides continued study of the properties of metal and stone in creating decorative work. Students employ advanced design and techniques to explore original, personal expression. A variety of materials and approaches are used in discovering new and independently creative finished pieces.

ART 237 Enameling on Metal II

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 137

Provides continued study of Enameling on Metal I with emphasis on individual designs, advanced techniques, and the effect of technology on the craft.

ART 238 Film Photography II

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Prerequisite: ART 138 or PHO 120 or PHO 121

This course is a further exploration in camera and lab operations with an emphasis on individual creativity. It includes the development of a comprehensive portfolio.

ART 239 Digital Photography II

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Prerequisite: ART 139

Expands upon the beginning digital photography class. Focuses on digital photography in terms of design and communication factors including color, visual design, lighting, graphics, and aesthetics.

ART 242 Alternative Photo Processes

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 238

Explores several non-silver photographic processes including the Platinotype, Cyanotype, and Van Dyke Brown printing techniques. Production of enlarged negatives from 35mm negatives and transparencies as required for contact printing for these processes.

ART 249 Mixed Media II: Digital Art

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Prerequisite: ART 149

Continues the design and creation of fine-art composites with the emphasis on digital tools and techniques. More advanced drawing and painting techniques are also emphasized, using digital creation techniques. Learners will develop and design artistic projects to demonstrate studio elements and principles. Portfolio development, strong content, and a blending of a variety of computer applications for art will be emphasized.

ART 250 Digital Art Foundations II

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Prerequisite: ART 150

Reviews and further explores the process of generating design utilizing a variety of digital tools. In this course, students will develop their proficiency with the digital tools and learn more advanced techniques in drawing and painting. Students will develop and evaluate their design-oriented projects using the elements and principles. Portfolio development, strong content, and a blending of a variety of computer art applications will be emphasized.

ART 251 Painting II

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 151

This course further explores techniques, materials, and concepts used in opaque painting processes in oil or acrylic painting, with emphasis on composition and content development.

ART 252 Painting III

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 251

Provides continued exploration of techniques, materials, and concepts used in opaque painting processes in oil or acrylic painting, with emphasis on composition and content development.

ART 253 Painting IV

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 252

Explores advanced techniques, materials, and concepts used in opaque painting processes, with emphasis on the development of themes and a cohesive body of work.

ART 254 Advanced Figure Painting

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Prerequisite: ART 154

Offers continued study of painting the human figure with advanced problem solving in composition and experimentation with materials and techniques.

ART 255 Mural Painting I

3 Credit Hours • 90 Contact Hours (Studio)

This course introduces the student to the history, techniques, materials and concepts of mural painting with an emphasis on composition and content development.

ART 256 Mixed Media Painting

3 Credit Hours • 90 Contact Hours (Studio)

Introduces the use of mixed media materials as alternative painting processes. This course explores new techniques,

alternative painting materials, and concepts used in painting with mixed and alternative materials. Students will also work on composition and content development.

ART 261 Ceramics II

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 161

A continuation of ART 161, this course emphasizes skill, technique, and form.

ART 262 Ceramics III

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 261

Encourages students to develop an individual style of wheel thrown and hand built ceramic forms with continuing involvement in surface treatment.

ART 263 Ceramics IV

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 262

Continues advanced work with emphasis on various clay bodies, unique glazes and engobes, combining different textures and shapes, and development of personal forms.

ART 264 Ceramic Sculpture

3 Credit Hours • 90 Contact Hours (Studio)

Explores a variety of processes to create three-dimensional images in clay. Focuses on hand-built sculptures without using a potter's wheel and relying on very basic tools. Encourages creative experimentation and engaging in the process.

ART 265 Sculpture II

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 132 or ART 165

Develops an understanding and focus on manipulation of three-dimensional form, with greater concentration on individual creativity and style.

ART 280 Internship

1-6 Credit Hours • Per Credit Hour, 45 Contact Hours (Internship)

Note: Must have faculty consent to enroll

Provides the opportunity for students to gain supervised occupational experience in any of the disciplines involving the visual arts, including, but not limited to, gallery or museum administration and graphic design. Instruction is coordinated by the on-site supervisor and instructor and is totally based on the student's occupational experience plan.

ART 289 Capstone

1-6 Credit Hours • Per Credit Hour, 30 Contact Hours (Lab)

Note: Must have faculty consent to enroll

Provides a demonstrated culmination of learning within a given program of study.

Astronomy Courses**AST 101 Planetary Astronomy with Lab: SC1**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Quantitative Literacy

Focuses on the history of astronomy, naked-eye sky observation, tools of the astronomer, contents of the solar system and life in the universe. Incorporates laboratory experience.

AST 102 Stellar Astronomy with Lab: SC1

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Quantitative Literacy

Emphasizes the structure and life cycle of the stars, the sun, galaxies, and the universe as a whole, including cosmology and relativity. Stellar phenomena including white dwarves, black holes will be explored. Incorporates laboratory experience.

AST 110 Colorado Night Sky III

1 Credit Hour • 15 Contact Hours (Lecture)

Develops an appreciation of and competence in observational astronomy with the naked eye or small telescope. Introduces the use of images from major telescopes and spacecraft as a tool for experiencing the night sky. Special emphasis will be placed on the World Wide Telescope and what it has to offer. Rare observations such as supernovae, comets and solar activity will also be covered. Advanced tools of telescope astronomy and astrophotography may also be discussed. Emphasis is on observation rather than theory.

AST 155 Astronomy of Ancient Cultures: SC2

3 Credit Hour • 45 Contact Hours (Lecture)

Prerequisite: College Quantitative Literacy

Introduces the study of archeoastronomy and ethnoastronomy. The principles of unaided eye observational astronomy, timekeeping, navigation, religion and ritual, political power, cosmology and worldview are covered. Methods of the ethnoastronomer, including measurement of architectural alignments, analysis of written records, examination of art, and general knowledge about a culture, will be discussed.

Auto Motorsports Technology Courses**AUT 105 Introduction to Motorsports Technology**

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Provides an introduction to the motorsports industry and support industries. Introduces shop safety and vehicle safety.

AUT 108 Racing Vehicle Systems

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: AUT 105

Introduces racing vehicle systems, placing emphasis on chassis design, suspension and steering, engine systems, ignition systems, cooling systems, lubrication systems, clutch systems, transmissions, drive axles, and brake systems.

AUT 109 High Performance Suspension & Chassis Design

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Introduces the fundamentals of chassis types and components. Includes steering and suspension component theory, tire and wheel theory, chassis design, and geometry theory as applied to oval track, drag race, and road race vehicles.

AUT 110 High Performance Suspension & Chassis Setup

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Introduces chassis set-up based on vehicle purpose. Incorporates chassis measurement, including ride heights, caster, camber, steering toe, ackerman, control arm angles, roll centers, and weight distribution. All measurements are taken and adjustments completed to allow the vehicle to perform as desired.

AUT 116 High Performance Brake Systems

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Introduces high performance brake systems as applied to racing vehicles.

AUT 118 High Performance Power Trains

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Introduces high performance transmissions, drive lines, and differentials. Includes design, repair, and service techniques as applied to racing vehicles.

AUT 119 High Performance Electrical & Fuel Systems

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Introduces electrical and fuel systems as applied to racing vehicles. Includes carburetion, fuel injection, fuel pumps, fuel cells, ignition systems, switches, and wiring.

AUT 125 Engines I

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Provides for individual study, enabling self-paced instruction and features an open entry, open exit system. Emphasizes video and computer technology. Includes operation and construction of the internal combustion engine, both domestic and foreign. Covers inspection, measuring, parts identification, and vehicle I.D. The student presents video and computer knowledge by use of mock-up engines with instructor supervision.

AUT 126 Engines II

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Lecture/Lab Combination)

Prerequisite: AUT 125

Develops procedures of diagnosis and testing from a knowledge of engine operation. Performs a complete engine rebuild process including the use of special equipment studied in AUT 125 and through the use of video and computer-assisted instruction.

AUT 127 High Performance Lubrication & Cooling Systems

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Introduces basics of wet and dry sump lubrication systems, oil delivery and filtration systems, oil chemical design and function. Focuses on the theory of cooling system design, components and coolants used in high performance applications.

AUT 128 High Performance Engine Design, Blueprinting & Testing

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Introduces high performance engine theory, design, components and their function. Emphasizes disassembly and assembly techniques and an introduction to dynamometer testing.

AUT 136 Introduction to Racecar Body Fabrication

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Introduces a variety of techniques used in the forming of racecar body panels made up of various types of materials. Emphasizes sheet steel, aluminum, and composite plastics. Students practice the fabrication and finishing of body panels. Tools and equipment typically used in the industry are also covered.

AUT 137 Introduction to Racecar Chassis Fabrication

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Introduces the student to various designs and methods for fabrication of racecar chassis and roll cage components. Covers body mounting techniques and suspension pick up points.

AUT 205 Advanced Automotive Engines

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Lecture/Lab Combination)

Prerequisite: AUT 126

This course is a continuation of Automotive Engines II with an emphasis on advanced diagnosis and engine rebuild techniques.

AUT 206 High Performance Engines

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Focuses on the theory of design and development of high-performance engines. Covers the use of specialty equipment for the development of high-performance engines.

Automotive Collision Technology Courses**ACT 101 Introduction to Automotive Collision Technology**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Provides an orientation to the automotive collision repair industry which includes an overview of job possibilities and various types of automobile construction. This course covers names, uses, and maintenance procedures for a variety of tools and equipment with a focus on general collision repair and refinishing, shop safety procedures with an emphasis on personal and environmental safety issues, proper handling and disposal of hazardous materials.

ACT 111 Metal Welding & Cutting I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101 or concurrent enrollment

Covers sheet metal oxygen-acetylene welding and MIG welding techniques including safety, materials, equipment, and setups. Personal and vehicle protective measures prior to welding procedures are presented.

ACT 121 Non-Structural Repair Preparation

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101 or concurrent enrollment

Covers the basic characteristics of preparation for automotive repair. Students familiarize themselves with damage analysis, extent of damage, and the sequence of repair. Focuses on removal of vehicle components and protection of panels along with storage and labeling of parts. Safety procedures and equipment use are included.

ACT 122 Panel Repair & Replacements

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 111, ACT 123

Covers straightening techniques including tension pulls/stress relief, metal finishing, metal shrinking, and use of fillers. Emphasizes the identification, handling, and replacement of parts such as adjustment and alignment of bolt-on parts, fixed parts, and accessories. Training covers the use of adhesives, sound deadeners, and welding methods performed during repairs.

ACT 123 Metal Finishing & Body Filling

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101 or concurrent enrollment

Covers metal finishing, metal shrinking, and the use of cosmetic fillers. Emphasis is placed on the use of proper tools required to perform these tasks, including use, selection, and safety procedures for tools and equipment selected.

ACT 124 Replace Weld-on Exterior Panel

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101 or concurrent enrollment, ACT 111

Covers the replacement of welded-on exterior panels such as quarters, roofs, cab panels, side panels, etc. Emphasis is placed on the use of proper tools required to perform these tasks,

including use, selection, and safety procedures for tools and equipment selected.

ACT 131 Structural Damage Diagnosis

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101 or concurrent enrollment

Focuses on methods of frame measurement using dimension charts and service manuals. Includes the use of self-centering gauges and mechanical and electronic measuring. Appropriate terms and definitions of vehicle structures and vehicle diagnosis are covered, including identification and analysis of damage. Includes the techniques for basic hook ups and safety procedures used in making corrective pulls.

ACT 132 Structural Damage Repair

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101 or concurrent enrollment, ACT 131 or concurrent enrollment

Continues the study and application of frame measurement and repair. The student applies methods found in dimension charts and service manuals for vehicle diagnosis and straightening. Training includes the replacement of a structural panel with the identification of damaged suspension components replaced according to manufacturer's recommendations.

ACT 142 Surface Preparation I

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101 or concurrent enrollment

Covers surface preparation for refinishing including cleaning, sanding, feather edging, chemical treatment of bare materials, and priming. The application of primers, including rationale and use is covered. In addition, the student learns skills for proper removal and storage of exterior trim and protection of adjacent panels.

ACT 143 Spray Equipment Operation

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101 or concurrent enrollment

Covers the inspection, cleaning, and determination of the condition of spray guns and related equipment. Students learn skills for adjusting spray guns by setting-up and testing spray gun operations.

ACT 144 Refinishing I

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101 or concurrent enrollment, ACT 143 or concurrent enrollment

Provides the knowledge needed for application and use of automotive paint systems. Course includes locating color codes, mixing formulas, matching, and selections of materials. Proper paint gun use and adjustments are taught for the product being applied. In addition, the student practices correct masking and detailing techniques.

ACT 151 Plastics & Adhesives I

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101 or concurrent enrollment

Designed to teach the state-of-the-art repair for both rigid and flexible plastic components and choosing adhesives using the latest manufacturer's repair techniques.

ACT 160 Custom Painting

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101, ACT 142, ACT 143, ACT 144

This course provides instruction in basic custom paint application such as pearl paints, candy colors, metal flakes, etc.

ACT 164 Hobbyist's Paint & Body

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Grading: P/F only

Provides an opportunity for current and former students enrolled in the Auto Collision Technology program to practice skills previously learned, using their own vehicles as projects. Any automotive hobbyist who is not a former student may also sign up for the course; however, previous knowledge of basic body working and painting procedures is strongly recommended.

ACT 165 Automotive Body Customizing I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101, ACT 111, ACT 123, ACT 151

Covers tool identification welding (mig and resistance), plasma cutting, metal finishing, metal shrinking and the use of cosmetic fillers. Emphasis is placed on the use of proper tools required to perform body customizing tasks, including use, selection and safety procedures for tools and equipment selected.

ACT 166 Automotive Body Customizing II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101, ACT 111, ACT 121, ACT 122, ACT 123, ACT 165 or concurrent enrollment

Covers modification of vehicle and vehicle parts such as Chopping, measuring, realigning, fabricating, recessing, shaping etc.

ACT 167 Automotive Body Customizing III

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101, ACT 111, ACT 121, ACT 122, ACT 123, ACT 165, ACT 166

Covers the completion of modifications that were started in Automotive Body Customizing II along with the addition of body molding kits.

ACT 170 Automotive Collision Technology Lab Experiences I

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101 or concurrent enrollment

Designed to prepare the student to perform basic tasks for a specialized area in a controlled instructional lab.

ACT 171 Automotive Collision Technology Lab Experiences II

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101 or concurrent enrollment, ACT 170 or concurrent enrollment

Course is a continuation of Lab experience. Designed to prepare the individual to perform basic tasks for a specialized area in a controlled instructional lab.

ACT 172 Automotive Collision Technology Lab Experiences III

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101, ACT 170

Course is a continuation of Lab experience. Designed to prepare the individual to perform basic tasks for a specialized area in a controlled instructional lab.

ACT 180 Automotive Collision Repair Internship Level I

2 Credit Hours • 90 Contact Hours (Internship)

Prerequisite: Completion of coursework in a specialized area

Designed to meet the needs of the student in a selected specialized area in a work-based environment. Individualized instruction at the job site is coordinated based on student's interest and instructor approval.

ACT 181 Automotive Collision Repair Level II Internship

2 Credit Hours • 90 Contact Hours (Internship)

Prerequisite: Completion of all courses in ACT specialization area
Course is a continuation of Level I Internship. Student uses the knowledge and skills acquired throughout the ACT program in a job site placement.

ACT 205 Estimating & Shop Management

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101 or concurrent enrollment, ACT 121 or concurrent enrollment, ACT 131 or concurrent enrollment

Initiates written estimates on damaged vehicles. Students learn shop management including work orders, ordering supplies, operating costs, time cards, shop liabilities, employee's safety and insurance management issues.

ACT 207 Customer Relations & Sales

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101

Practices customer relation skills needed to successfully sell service and repairs. During this course students will learn to explain repair processes and how to deal with customers who have a loss and appropriately direct them through the proper procedures of repair.

ACT 211 Metal Welding & Cutting II

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101

Covers MIG welding procedures of seam weld, stitch welds, and destructive testing. Resistance spot welding, which includes two-sided spot weld, plasma cutting, safety, materials, and equipment and operating procedures, with emphasis on shop safety is also presented.

ACT 215 Paintless Dent Repair

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 121, ACT 122

Examines straightening techniques associated with hail dents and door dings and emphasizes the identification of repairable dents and tools used for those repairs. This course includes the use of conventional Paintless Dent Repair (PDR) tools, glue pulling, and induction heating dent removal in aluminum and steel panels. Topics include lighting, damage access, color sanding and polishing, and estimating repair cost.

ACT 221 Moveable Glass & Hardware

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101

Covers door glass, vent windows, and glass mechanisms (both electric and mechanical) with emphasis on removal and replacement. In addition, interior trim panels, seats, and headliners are removed and replaced. Student learns proper care and treatment of vehicle seat protectors plus the proper use of tools required to perform these tasks.

ACT 226 Production

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101, ACT 111, ACT 121, ACT 123, ACT 124, ACT 142, ACT 143, ACT 144, ACT 151

Simulates the actual working procedures of an auto collision repair technician. The student performs a variety of structural and non-structural repairs, as well as refinishing operations in accordance with industry procedures, and in compliance with estimates and flat-rate times from collision estimating guides. Students also develop leadership abilities and time management skills.

ACT 231 Advanced Structural Damage Diagnosis & Repair

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101 or concurrent enrollment, ACT 131 or concurrent enrollment, ACT 132 or concurrent enrollment

Covers major automotive body repair in vehicles with major damage on conventional structures and unibody structures. Student learns the operation of equipment and techniques used to straighten and align damaged frames. Identification and analysis of frames, hot and cold stress relieving, servicing, and

sectioning of structural frames are also included. Liability issues and the importance of making these corrections according to the manufacturer's recommendations and industry standards are emphasized.

ACT 232 Automotive Glass Repair

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101 or concurrent enrollment

Covers the removal and replacement of automotive glass using manufacturer's specifications, proper tools, and recommended materials. The course emphasizes the application of skills for the removal and replacement of modular and fixed glass using manufacturer's specifications and procedures.

ACT 241 Paint Defects

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 144

Covers paint defects. Emphasizes the causes of paint defects with methods to cure problems during and after refinishing procedures. Students learn to identify the proper surface preparations to apply prior to refinishing. Training includes using paint equipment and determining paint film thickness with proper temperatures for refinishing.

ACT 242 Surface Preparation II

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 142, ACT 143

Emphasizes surface preparation for refinishing including cleaning, sanding, feather edging, chemical treatment of bare metals, and priming. The application of primers, including why and where to use them is covered.

ACT 243 Refinishing II

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101 or concurrent enrollment, ACT 143 or concurrent enrollment, ACT 144 or concurrent enrollment

In this advanced course students learn the necessary skills used to tint and blend panels working with the latest finishes and paints. Special coatings and procedures are covered in this course.

ACT 244 Final Detail

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 101 or concurrent enrollment

Focuses on the detailing procedures in paint refinishing of vehicles. Methods and techniques are specialized to enhance painting skills. Transfers and tapes methods with decals, etc. are demonstrated.

ACT 251 Plastics & Adhesives II

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ACT 121, ACT 243

Emphasizes advanced plastic and adhesives. The current state-of-the-art repair for both rigid and flexible plastic components using the latest manufacturer's repair techniques is presented. Sheet Molded Compound procedures and the use of proper adhesives are covered.

Automotive Service Technology Courses

ASE 102 Introduction to the Automotive Shop

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prepares the incoming automotive student to work in the shop safely and gain familiarity with the shop and common equipment.

ASE 110 Automotive Brake Service I

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 102 or concurrent enrollment

Introduces the basic theory of automotive braking systems including operation, diagnosis, basic repair of disc and drum friction assemblies, and basic hydraulic braking systems. This course meets MLR/AST/MAST program accreditation requirements.

ASE 111 Automotive Brake Service II

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 110 or concurrent enrollment

Covers diagnostics, test procedures, and repair to automotive foundation braking system. This course also introduces the components, types of Antilock Braking Systems (ABS), and traction control systems of current vehicles. This course meets MLR/AST/MAST program accreditation requirements.

ASE 120 Basic Automotive Electricity

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 102 or concurrent enrollment

Introduces vehicle electricity, basic electrical theory, circuit designs, and wiring methods. This course focuses on multimeter usage and wiring diagrams. This course meets MLR/AST/MAST requirements.

ASE 123 Starting & Charging System

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 120 or concurrent enrollment

Covers the operation and theory of a vehicle battery, testing, service, and repair of starting and charging systems including voltage testing, draw testing. This course meets MLR/AST/MAST program requirements.

ASE 130 General Engine Diagnosis

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 123

Covers how to perform basic engine diagnosis to determine condition of engine including engine support systems. This course meets MLR/AST/MAST requirements.

ASE 132 Ignition System Diagnosis & Repair

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 130 or concurrent enrollment

Focuses on lecture and related laboratory experiences in the diagnosis, service, adjustments, and repair of various automotive ignition systems.

ASE 134 Automotive Fuel & Emissions Systems I

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 132

Focuses on the diagnosis and repair of automotive fuel emission control systems, filter systems, and spark plugs. This course also includes maintenance to Diesel Exhaust Fluid (DEF) systems.

ASE 140 Suspension & Steering I

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 102 or concurrent enrollment

Focuses on diagnosis and service of suspension and steering systems and components. This course meets MLR/AST/MAST requirements.

ASE 141 Suspension & Steering II

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 140 or concurrent enrollment

Covers design, diagnosis, inspection, service of suspension, and steering systems used on light trucks and automobiles including power steering and Supplemental Restraint System (SRS) service. This course meets AST/MAST requirements.

ASE 150 Manual Drive Train & Axle Maintenance

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 102 or concurrent enrollment

Covers the operating principles and repair procedures relating to axle-shafts, propeller shafts, and universal joints. This course meets MLR/AST/MAST requirements.

ASE 151 Automotive Manual Transmission/Transaxles & Clutches I

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 150 or concurrent enrollment

Focuses on the diagnosis and repair of automotive manual transmissions, transaxles, clutches, and related components. This course meets AST/MAST requirements.

ASE 152 Manual Transmission, Transaxles & Clutches II

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 151 or concurrent enrollment

Focuses on lecture and related laboratory experiences in the diagnosis and repair of automotive differentials, four-wheel, and all-wheel drive units.

ASE 160 Automotive Engine Repair

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 102 or concurrent enrollment

Focuses on the service of cylinder head, valve-train components, and cooling system components including engine removal, re-installation, and re-mounting systems. This course meets MLR/AST/MAST requirements.

ASE 161 Automotive Engine Repair & Rebuild

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Lecture/Lab Combination)

Prerequisite: ASE 160 or concurrent enrollment

Focuses on lecture and laboratory experiences in the disassembly, diagnosis, and reassembly of the automotive engine. Topics include the diagnostic and repair procedures for the engine block and head assemblies.

ASE 163 Automotive Component Removal & Replacement

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Practical methods of removal and installation of engines, transmissions, transfer cases, clutch assemblies, bolt, and thread repair.

ASE 201 Automotive Parts Management

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ASE 102, ASE 120, ASE 123 and consultation with advisor

Covers instruction as to the proper methods in completing parts invoices, repair orders, sales receipts and tickets. Also included are handling and pricing procedures utilized in parts areas: warehouse distributor, jobber, retail and wholesale prices.

ASE 210 Automotive Power & ABS Brake Systems

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 111 or concurrent enrollment

Covers the operation and theory of the modern automotive braking systems including the operation, diagnosis, service, and repair of the anti-lock braking systems and power assist units. This course also covers the machining operations of today's automobile brake systems. This course meets AST/MAST requirements.

ASE 220 Specialized Electronics Training

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 120

Provides a systematic approach to automotive electrical and electronic systems. This course applies electrical principles to semiconductors and microprocessors commonly found in automobiles and covers diagnostic procedures that have applications to present and future automotive electronics and electrical systems.

ASE 221 Automotive & Diesel Body Electrical

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Lecture/Lab Combination)

Prerequisite: ASE 120

Provides a comprehensive study of the theory, operation, diagnosis, and repair of vehicle accessories.

ASE 231 Automotive Computers & Ignition Systems

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 120, ASE 134

Focuses on lecture and laboratory experiences in the inspection and testing of typical computerized engine control systems.

ASE 233 Auto Fuel Injection & Emissions Systems II

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Lecture/Lab Combination)

Prerequisite: ASE 120, ASE 134, ASE 231

Focuses on lecture and related laboratory experiences in the diagnosis and repair of electronic fuel injection systems and modern exhaust systems.

ASE 235 Drivability & Diagnosis

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 233

Focuses on diagnostic techniques and the use of diagnostic scan tools, oscilloscopes, lab scopes, multi-meters, and gas analyzers.

ASE 240 Suspension & Steering III

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: ASE 141 or concurrent enrollment

Covers operation of steering and power steering systems. It will also include different alignment types and procedures.

ASE 250 Automatic Transmission/Transaxle Service

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ASE 102 or concurrent enrollment

Focuses on practical methods of maintaining, servicing, and performing minor adjustments on an automatic transmission and transaxle. This course meets MLR/AST/MAST requirements.

ASE 251 Automotive Transmission & Transaxle Repair

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: ASE 250

Covers diagnosis, principles of hydraulics, principles of electronic components, power flow, theory of operation including removal,

installation, and replacement of transmission/transaxle and components. This course meets AST/MAST requirements.

ASE 265 Heating & Air Conditioning Systems

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Lecture/Lab Combination)

Prerequisite: ASE 123

Emphasizes lecture and related laboratory experiences in the diagnosis and service of vehicle heating and air conditioning systems and their components.

ASE 282 Internship: General (Summer)

0-12 Credit Hours • Per Credit Hour, 45 Contact Hours (Internship)
Emphasizes practical on-the-job, work-related experience that corresponds to the area of study. In this semester, the student takes all related sponsor requirements in (STS) Service Training Standards (General Motors) or (F.A.S.T.) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

Biology Courses

BIO 103 Principles of Animal Biology: SC2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy, College Quantitative Literacy

Introduces the study of animals and their interactions with the environment. This course includes principles of evolution, taxonomy, phylogeny, morphology, behavior, and ecology. It includes the study of animal diversity, emphasizing the characteristics and classifications of major phyla. The loss of biodiversity and conservation will also be covered.

BIO 104 Biology: A Human Approach: SC1

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Reading & Writing Literacy, College Quantitative Literacy

Note: College level reading skills are required for success in this course

Develops a basic knowledge of the structure and function of the human body by studying the body's structure as a series of interrelated systems. Includes cardiovascular, respiratory, digestive, lymphatic, musculoskeletal, nervous, endocrine, reproductive and urinary systems, and genetics. Emphasizes disease prevention and wellness. This course includes laboratory experience.

BIO 105 Science of Biology with Lab: SC1

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Reading & Writing Literacy, College Quantitative Literacy

Note: College level reading skills are required for success in this course

Examines the basis of biology in the modern world and surveys the current knowledge and conceptual framework of the discipline. Explores biology as a science, a process of gaining new knowledge, and the impact of biological science on society. This course includes a laboratory experience. Designed for non-science majors.

BIO 106 Basic Anatomy & Physiology

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Reading & Writing Literacy, College Quantitative Literacy

Focuses on basic knowledge of body structures and function and provides a foundation for understanding deviations from normal and disease conditions. This course is designed for individuals interested in health care and is directly applicable to the Practical Nursing Program and the Medical Office Technology program.

BIO 111 General College Biology I with Lab: SC1

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

Prerequisite: ENG 121 (Grade of C or higher) or concurrent enrollment, College Quantitative Literacy, or permission of instructor

Examines the fundamental molecular, cellular and genetic principles characterizing plants and animals. Includes cell structure and function, and the metabolic processes of respiration and photosynthesis, as well as cell reproduction and basic concepts of heredity. The course includes laboratory experience.

BIO 112 General College Biology II with Lab: SC1

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

Prerequisite: BIO 111 (Grade of C or higher)

Examines the fundamental principles of ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience.

BIO 148 Basic Ecology

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Studies the interrelationships between organisms and their environment. Includes population dynamics and the diversity of ecosystems. Laboratory includes field experience.

BIO 150 Animal Biology

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Focuses on the phylogenetic study of animals. Includes an introduction to the invertebrates and a concentrated study of the diverse vertebrate forms. Laboratory experiences parallel lecture topics.

BIO 201 Human Anatomy & Physiology I with Lab: SC1

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: BIO 111 (Grade of C or higher), Biology Placement Test with a score of 70 or higher, or permission of Department Chair or Advisor

Focuses on an integrated study of the human body including the histology, anatomy and physiology of each system. Examines molecular, cellular, and tissue levels of organization plus integuments, skeletal, articulations, muscular and nervous systems. Includes a mandatory hands-on laboratory experience covering microscopy, observations, and dissection. This is the first semester of a two-semester sequence.

BIO 202 Human Anatomy & Physiology II with Lab: SC1

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: BIO 201 (Grade of C or higher)

Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: endocrine, cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving microscopy, observations, and dissection.

BIO 203 Advanced Human Anatomy

2 Credit Hours • 60 Contact Hours (Lab)

Examines the gross anatomical structure of the human body and the relationship between form and function. Students will prosect a human cadaver. Systems covered will include integument, digestive, respiratory, skeletal, muscular, reproductive, endocrine, lymphatic, urinary, nervous and cardiovascular. This is a course designed for allied health, education, biology and other students who wish to obtain advanced knowledge of human anatomy. Requires hands-on laboratory experience.

BIO 204 Microbiology with Lab: SC1

4 Credit Hours • 90 Contact Hours (45 Lecture, 45 Lab)

Prerequisite: BIO 111 (Grade of C or higher), Biology Placement Chair or Advisor

Covers the diversity of microorganisms, their structure, physiology, and the identification process. There is an emphasis on microorganisms that cause infectious disease and the process of infection, host immune responses, and methods to control microorganisms. Laboratory experiences include culturing, identifying, and controlling microorganisms. This course is designed for students pursuing a health science field.

BIO 216 Human Pathophysiology

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: BIO 202

Focuses on the alterations in physiological, cellular, and biochemical processes, the associated homeostatic responses, and the manifestations of disease. Prior knowledge of cellular biology, anatomy, and physiology is essential for the study of pathophysiology.

BIO 221 Botany with Lab: SC1

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

Prerequisite: BIO 111

Covers plants, emphasizing photosynthetic pathways, form and function, reproduction, physiology, diversity, and evolution. This course requires mandatory hands-on laboratory and research experience and is designed for biology majors.

BIO 224 Genetics: SC1

4 Credit Hour • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: BIO 111

Examines the structure, transmission, and expression of hereditary information with emphasis on Molecular genetics, Mendelian and non-Mendelian inheritance, and population and quantitative genetics. Laboratory experiences include classical and molecular genetics activities.

Business Courses**BUS 115 Introduction to Business**

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces the application of fundamental business principles to local, national, and international forums. This course examines the relationship of economic systems, governance, regulations, and law upon business operations. It surveys the concepts of career development, business ownership, finance and accounting, economics, marketing, management, operations, human resources, regulations, and business ethics.

BUS 181 Internship

3 Credit Hours • 135 Contact Hours (Internship)

Note: Must have Program Advisor's approval to enroll

Provides students with hands-on training in their career field. Occurs in a business setting arranged through a Student Work Experience (SWE)/Internship Coordinator, or by utilizing a current employment organization. Student is expected to work a minimum of 7.5 hours per week. Students attend three seminars during the semester of enrollment. Class utilizes cooperative work experience or project methods depending on the individual situation.

BUS 182 Internship

3 Credit Hours • 135 Contact Hours (Internship)

Prerequisite: BUS 181

Provides continued instruction and work experience.

BUS 203 Introduction to International Business

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: BUS 115 and sophomore standing

Provides an understanding of the fundamental nature of international business. This course will cover the development of international business; theories and methods of international trade; financing mechanisms and terms used in export documentation and export finance; effects of economic, political and cultural environment on international business and trade; impact of geography on business transactions; impact of legal systems of international business; and developing an effective international marketing strategy.

BUS 216 Legal Environment of Business

3 Credit Hours • 45 Contact Hours (Lecture)

Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues, and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

BUS 217 Business Communications & Report Writing

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Emphasizes effective business writing and cover letters, memoranda, reports, application letters, and resumes. This course includes the fundamentals of business communication and an introduction to international communication.

BUS 226 Business Statistics

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 112 or MAT 121

Focuses on statistical study, sampling, organizing and visualizing data, descriptive statistics, probability, bi-nominal distributions, normal distributions, confidence intervals, linear regression, and correlation. Intended for the business majors.

BUS 281 Internship

1-6 Credit Hours • Per Credit Hour, 45 Contact Hours (Internship)

Prerequisite: BUS 182

Provides continued instruction and the opportunity for students to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

BUS 282 Internship

1-6 Credit Hours • Per Credit Hour, 45 Contact Hours (Internship)

Prerequisite: BUS 281

Provides continued instruction with the opportunity for students to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

BUS 287 Cooperative Education

3 Credit Hours • 45 Contact Hours (Co-operative Education)

Provides students with the opportunity to supplement course work with practical work experience related to their educational program and occupational objectives. Students are placed at approved work stations related to their program of study. They work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor/coordinator.

BUS 289 Capstone

3 Credit Hours • 45 Contact Hours (Lecture)
Demonstrates the culmination of learning within a given program of study.

Business & Technology Education Courses

BTE 100 Computer Keyboarding

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Grading: P/F only

Designed for students who have minimal or no keyboarding skills. Introduces the touch method of keyboarding, as well as the basic operation and functions of the equipment. Emphasizes learning the alphanumeric keyboard, proper technique, and speed control.

BTE 102 Keyboarding Applications I

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: Ability to Keyboard 20 WPM or faculty consent

Designed for students with minimal keyboarding skills. Introduces letters, tables, memos, and manuscripts. Emphasizes speed and accuracy.

BTE 108 Ten-Key by Touch

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Introduces touch control of the ten-key pad. Emphasizes the development of speed and accuracy using proper technique.

BTE 111 Keyboarding Speedbuilding I

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: Ability to keyboard by touch or faculty consent

Grading: P/F only
Designed to increase speed and improve accuracy in keyboarding on the PC through the use of correct techniques and concentrated effort.

BTE 166 Business Editing Skills

3 Credit Hours • 45 Contact Hours (Lecture)
Provides proofreading techniques and reviews spelling, punctuation, grammar, and word processing formats on various types of business documents and worksheets.

BTE 187 Cooperative Education/Internship

3 Credit Hours • 135 Contact Hours (Internship)
Provides students with the opportunity to supplement course work with practical work experience related to their educational program and occupational objectives. Students are placed at approved work sites that are related to their program of study. They work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor/coordinator.

Carpentry Courses

CAR 101 Basic Safety

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 102 or concurrent enrollment, CAR 105 or concurrent enrollment

An overview of safety concerns and procedures in the construction field.

CAR 102 Hand & Power Tools

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 101 or concurrent enrollment, CAR 105 or concurrent enrollment

Focuses on basic hand and power tools including stationary tools. Emphasizes a hands-on approach to proper and safe use of these tools as it applies to the construction environment and is taught in conjunction with a lab or framing class.

CAR 103 Carpentry Basics

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 101 or concurrent enrollment, CAR 102 or concurrent enrollment, CAR 105 or concurrent enrollment
Provides a basic introduction to construction work for all crafts, safety concerns and procedures, and the safety and use of hand and power tools. This course specifically applies to construction work.

CAR 104 Floor & Wall Construction

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 103

Covers framing basics as well as the procedures for laying out and constructing a wood floor, and wall framing using common lumber as well as engineered building material. Includes instructions for selecting and installing metal framing for interior walls, exterior non-load bearing walls, and partitions.

CAR 105 Job Site Layout & Blueprint Reading

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 101 or concurrent enrollment, CAR 102 or concurrent enrollment

Introduces blue-print reading and how they apply to the construction site. Includes in-depth introduction to site layout (materials and methods).

CAR 115 Form & Foundation Systems

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 103, CAR 104 or concurrent enrollment, CAR 123 or concurrent enrollment, CAR 135 or concurrent enrollment

Covers materials and methods for concrete forms and foundations. Includes various reinforcement methods such as rebar and welded-wire fabric.

CAR 123 Roof Framing

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 103, CAR 104 or concurrent enrollment, CAR 115 or concurrent enrollment, CAR 135 or concurrent enrollment

Describes the various kinds of roofs and contains instructions for laying out rafters for gable roofs, hip roofs and valley intersections. Coverage includes both stick-built and truss-built roofs.

CAR 125 Roofing Materials & Methods

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 104, CAR 123 or concurrent enrollment

Covers application techniques and estimation of asphalt and wood roofing products and accessories including gutters and flashing.

CAR 130 Windows & Exterior Doors

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 104 or concurrent enrollment

Describes the various types of windows, skylights, and exterior doors and provides instructions for installing them. Includes instructions for installing weather-stripping and locksets.

CAR 134 Exterior Finishes & Trim

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 103, CAR 104

Utilizes hands-on techniques to illustrate exterior moisture, trim, and exterior door and window installation. Student will explore various residential materials and methods. Estimation of time and material will be discussed as well as general business practices.

CAR 135 Thermal & Moisture Methods & Materials

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 103, CAR 104 or concurrent enrollment, CAR 115 or concurrent enrollment, CAR 123 or concurrent enrollment

Focuses on selection and installation of various types of insulating materials in walls, floors, and attics. Covers the uses and

installation practices for vapor barriers and waterproofing materials.

CAR 140 Stair Construction/Layout

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAR 104 or concurrent enrollment

Covers the various types of wooden stairs used in residential and commercial construction, along with procedures for laying out stairs, cutting out stringers and installing and finishing stairs.

CAR 146 Interior Finishes - Drywall Construction

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAR 103, CAR 104

Covers the use of gypsum wall board and the techniques of concealing joints and fasteners, construction methods, estimation and a variety of texture finishes.

CAR 150 Interior Trim – General

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAR 103, CAR 104

Covers material choices and installation techniques of various interior trim, including interior doors, baseboard, and casement. Includes an overview of additional interior trim choices.

CAR 160 Floor Finishes

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAR 103, CAR 104

Covers installation and finishing of hardwood floors, laminate/engineered floors, and tile. Includes discussion on advantages and disadvantages of various choices available.

CAR 280 Internship

3 Credit Hours • 135 Contact Hours (Internship)

Note: Must have faculty consent to enroll

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

Chemistry Courses

CHE 101 Introduction to Chemistry I with Lab: SC1

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

Prerequisite: College Quantitative Literacy

Includes the study of measurements, atomic theory, chemical bonding, nomenclature, stoichiometry, solutions, acid and base, gas laws, and condensed states. Laboratory experiments demonstrate the above concepts qualitatively and quantitatively. Designed for non-science majors, students in occupational and health programs, or students with no chemistry background.

CHE 102 Introduction to Chemistry II with Lab: SC1

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

Prerequisite: CHE 101

Focuses on introductory organic and biochemistry (sequel to Introduction to Chemistry I). This course includes the study of hybridization of atomic orbital's for carbon, nomenclature of both organic and biochemical compounds, physical and chemical properties of various functional groups of organic chemistry, and physical and chemical properties of biochemical compounds along with their biochemical pathways. Laboratory experiments are included.

CHE 105 Chemistry In Context with Lab: SC1

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

Prerequisite: College Reading & Writing Literacy

Covers the study of measurements, matter, molecules, atoms, chemical bonding, nomenclature, energy, acids, bases, and nutrition. Course work examines chemistry in the modern world and surveys the current knowledge as well as the conceptual

framework of the discipline. Chemistry as a science is explored, as is the impact of chemistry on society. This course includes laboratory experience and is designed for non-science majors.

CHE 111 General College Chemistry I with Lab: SC1

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

Prerequisite: MAT 121 or concurrent enrollment, and CHE 101 (Grade of C or higher) or one year of high school chemistry

Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

CHE 112 General College Chemistry II with Lab: SC1

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

Prerequisite: CHE 111 (Grade of C or higher), MAT 121

Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, and electrochemistry. This course emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

CHE 211 Organic Chemistry I with Lab

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

Prerequisite: CHE 112 (Grade of C or higher)

Focuses on compounds associated with the element carbon including structure and reactions of aliphatic hydrocarbons and selected functional group families. The course covers nomenclature of organic compounds, stereochemistry, and reaction mechanisms such as SN1, SN2, E1 and E2. Laboratory experiments demonstrate the above concepts plus the laboratory techniques associated with organic chemistry. UCCS transfer equivalent CHEM 3101/3102

CHE 212 Organic Chemistry II with Lab

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

Prerequisite: CHE 211 (Grade of C or higher)

Explores the chemistry of carbon-based compounds, their reactions and synthesis including the structure, physical properties, reactivities, and synthesis of organic functional groups not covered in CHE 211 Organic Chemistry I. The course explores functional groups including alcohols, ethers, aromatics, aldehydes, ketones, amines, amides, esters, and carboxylic acids and the reactions and reaction mechanisms of aromatic compounds. An introduction to biochemical topics may be included if time permits. Laboratory experiences demonstrate the above concepts and the laboratory techniques associated with organic chemistry. UCCS transfer equivalent CHEM 3111/3112

Chinese Courses

CHI 111 Chinese Language I

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Focuses on the development of functional proficiency in listening, speaking, reading, and writing the Chinese language.

CHI 112 Chinese Language II

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: CHI 111

Continues Chinese Language I in the development of functional proficiency in listening, speaking, reading, and writing the Chinese language.

CHI 211 Chinese Language III

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: CHI 112

Continues Chinese Language II in the development of functional proficiency at the intermediate level in speaking, aural comprehension, reading, writing and cultural competency in the Chinese language. This course is conducted predominantly in Chinese.

College Composition & Reading Course**CCR 094 Studio 121**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: AAA 109 or concurrent enrollment**Note: CCR 094 must be taken concurrently with ENG 121*

Integrates and contextualizes reading and writing strategies tailored to co-requisite ENG 121 coursework.

Communication Courses**COM 115 Public Speaking**

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Combines the basic theory of speech communication with public speech performance skills. Emphasis is on speech delivery, preparation, organization, support, and audience analysis and delivery.

COM 125 Interpersonal Communication

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines the communication involved in interpersonal relationships occurring in family, social, and career situations. Relevant concepts include self-concept, perception, listening, nonverbal communication, and conflict.

COM 205 Voice and Diction

3 Credit Hours • 45 Contact Hours (Lecture)

Studies the physiological production of the speaking voice and methods for improving the quality of the spoken word in general American speech.

COM 214 Natural Resource Interpretation & Communication

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Provides communication and interpretation training for those required to interpret natural resource data about historical characters and times for the public. The course focuses on experiential skill development in the area of educational interpretation including, but not limited to, in-class and on-site interpretation of historical, geological, zoological, and other environmental topics and sites. It also stresses the preparation of educational presentations aimed at all levels of learners from pre-K through mature adulthood using various presentation techniques including, but not limited to, visual aids, props, dramatic performance, and puppetry.

COM 215 Gender Communication

3 Credit Hours • 45 Contact Hours (Lecture)

Examines contemporary theories and research in gendered communication. The course will involve reading and discussion in areas of gender differences in self-perception, social and media images of men and women, language usage and nonverbal behavior differences among genders. Relevant concepts include verbal communication, nonverbal communication, context, language, perception, and conflict.

COM 216 Advanced Public Speaking

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: COM 115

Emphasizes the continued study of rhetorical theory and analysis as it relates to public speaking.

COM 217 Group Communication

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines group communication theories with an emphasis on leadership and group behaviors. The course provides opportunities for group participation.

COM 220 Intercultural Communication: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Provides a global view of communication across cultures and brings an awareness of how perception, language, race, verbal, and nonverbal communication impact our behaviors, messages, and interactions. Emphasis is on developing effective and ethical cross-cultural communication skills, while also building an appreciation for different cultures.

COM 225 Organizational Communication

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Note: Students encouraged to take COM 115 and/or have organizational setting experience.

This course focuses on the role of communication theory and skills as they apply to business and organizational settings. Topics include organizational and leadership models, effective communication skills with peers, superiors, and subordinates, environmental factors impacting communication, and interviewing skills.

COM 230 Argumentation and Debate

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the student to the theory of argumentation, including reasoning, evidence, refutation, critical thinking, and extemporaneous speaking. The course includes practice in preparation and oral analysis of selected arguments and styles of debating.

COM 260 Listening in a Workplace Communication Setting

1 Credit Hour • 15 Contact Hours (Lecture)

Focuses on understanding and developing high-level listening skills. Through lecture and interactive exercises, students learn the fundamentals of effective listening.

COM 263 Conflict Resolution

1 Credit Hour • 15 Contact Hours (Lecture)

Focuses on handling conflict productively. Students gain insights into the roots of conflict and engage in skill practice in mediating interpersonal conflicts. The emphasis is on conflict prevention.

COM 269 Leadership

1 Credit Hour • 15 Contact Hours (Lecture)

Emphasizes the essential skills and attributes of leadership. Through lectures, activities and readings, the students will understand the differences between leadership and management, how theory leads to practice, and the appropriate leadership style to use according to the situation.

Computer Aided Drafting Courses

CAD 100 Print Reading for Computer Aided Drafting

3 Credit Hours • 52.5 Contact Hours (30 Lecture, 22.5 Lecture/Lab Combination)

Covers linetype identification, use of lineweights, file management, prototype/template creation using AutoCAD. Covers interpretation of industry standards in dimensioning, symbology, drawing notes, scales, and reading working drawings. Architecture, engineering, design related, civil/survey, manufacturing, HVAC, and welding are industries discussed in this course.

CAD 101 Computer Aided Drafting/2D I

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: CAD 100 or concurrent enrollment

Focuses on basic computer aided drafting skills using the AutoCAD software. Includes file management, Cartesian coordinate system & dynamic input, drawing templates, drawing aids, linetype and lineweights, layer usage, drawing & editing geometric objects, polylines & splines, array, text applications, creating tables, basic dimensioning and Help access.

CAD 102 Computer Aided Drafting/2D II

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: CAD 101

Focuses on intermediate 2D Computer aided drafting skills using the AutoCAD software. Includes blocks, wblocks & dynamic blocks, hatching, isometric drawings, advanced dimensioning and dimension variables, layouts, paper space and viewports, templates, external references, attributes, raster images, & printing/plotting.

CAD 104 CAD for Architecture

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: CSC 105 or CIS 118 recommended, but not required
Focuses on basic to intermediate 2D architectural computer aided drafting skills using the AutoCAD software. Includes creating architectural templates, annotations, tables, annotation styles, dimensions styles and architectural standards. This course also covers manipulation of lines, plines, blocks, xrefs, and raster images to produce construction document set.

CAD 105 AutoCAD for Interiors

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: CSC 105, IND 100; IND 111 or concurrent enrollment

Focuses on basic to intermediate 2D computer aided drafting interior design skills using the AutoCAD software. Includes templates, linetype and lineweights, layer usage, drawing & editing geometric objects, text applications, basic to advanced dimensioning skills. Creating and editing blocks, hatching, layouts/paper space and multiple viewports, external references, attributes, raster images, & printing/plotting.

CAD 115 Sketchup

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Introduces techniques and common practices of 3D modeling using Sketchup software. Focuses on the creation and editing of virtual three-dimensional forms and volumes and the organization of their elements through the various features of the software. Includes applying material and textures, changing the appearance of models with styles and shadows and introduces the basic techniques of presenting and sharing the 3D model.

CAD 153 Introduction to Creo Basics

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAD 101

Introduces basic Creo software, a 3D Parametric Solid modeling program, and its operations such as part, assembly, and drawing creation. The course includes how to construct, modify, and manage complex parts in 3D space as well as produce 2D drawings from the 3D models.

CAD 215 Advanced CAD for Interiors

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAD 105, IND 111

Introduces skills to create 3D visualization models and presentations for Interior Design applications, to enhance the students design process and the ability to portray design concepts. In addition, topics include training in visualization of complex spatial designs as a means of enhancing the function and quality of interior spaces and interior furnishing components. This course includes advanced 3D computer-aided drafting software concepts to create rendered interior spaces.

CAD 219 3DS Max

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Introduces 3D model creation and editing, rendering and animation using the AutoDesk 3DS Max software. Focuses on 3D geometry, texture mapping, lighting, camera placement, shading, photo-realistic rendering, animation techniques, and walk through animations.

CAD 220 Advanced 3DS MAX Character Modeling

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: CAD 219

Focuses on advanced 3D geometry and character construction, animation and rendering techniques using Autodesk 3D Max software. Emphasis will include 3D geometry manipulation, character/bone/biped constructions, animation and video post-production of 3D animations.

CAD 224 Revit Architecture

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: AEC 102, AEC 104, AEC 107, AEC 121

Introduces students to the AutoDesk Revit Architecture software. Examines the Building Information Modeling approach to 2D and 3D architectural construction documents. Covers the creation of floorplans, elevations, sections, 3D models, perspective Renderings and Walkthroughs with this software application.

CAD 227 Advanced Revit Architecture

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAD 224

Focuses on the advanced applications of the AutoDesk Revit Architecture software. Includes Family Editing, topographic Site Plans, Worksharing, Phases, Key Schedules, custom Annotation, Templates and presentation techniques.

CAD 253 Advanced Creo

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAD 153

Introduces advanced applications of the 3D parametric software Creo. This course focuses on advanced part creation, drawing manipulation, advanced assembly techniques, documentation of bill of materials and parts lists, rendering, animation, and part and assembly analysis.

CAD 255 SolidWorks/Mechanical

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 100 or MAC 102
 Introduces parametric feature-based solid modeling 3D concepts to build confidence in 3D thinking and progresses to three-dimensional parameters. This course provides instruction on how to construct, modify, and manage complex parts in 3D space as well as to produce 2D drawings from the 3D models.

CAD 259 Advanced SolidWorks

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 255
 Introduces advanced applications of the 3D parametric software SolidWorks. Focuses include management of design data, advanced assembly, analysis of model creations, documentation of bill of materials and parts lists, rendering, animation, and dynamic simulation and testing a model assembly.

CAD 262 3D Printing/Additive Manufacturing

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 255, CAD 259
 Provides the student with the ability to blend the virtual and real design worlds together through the use of 3D CAD Modeling, and 3D Printing.

CAD 266 Advanced 3D Printing

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 153, CAD 155, CAD 255, CAD 259, CAD 262
 Provides the student with the ability to create Advanced 3D solid models using 3D printing and 3D Scanning technology and various CAD software programs.

CAD 269 Augmented Reality & Virtual Reality (AR/VR) in CAD

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
 Note: Instructor Signature Required
 Explores the current and emerging technology and concepts involving augmented and virtual reality (AR/VR) in the computer-aided drafting and design industries. This course presents AR and VR content for three-dimensional presentation.

CAD 280 Internship

3 Credit Hours • 135 Contact Hours (Internship)
Prerequisite: CAD 100, CAD 101, CAD 102
 Note: Must have faculty consent to enroll
 Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with direct guidance of the instructor.

Computer & Networking Technology Courses

CNG 101 Networking Fundamentals

3 Credit Hours • 45 Contact Hours (Lecture)
 Introduces network fundamentals using the OSI (Open Systems Interconnection) model and TCP/IP (Transmission Control Protocol/Internet Protocol) suite, fundamentals of Ethernet, IP addressing, and building simple LANs (Local Area Networks).

CNG 102 Local Area Networks

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: CNG 101 or concurrent enrollment or CNG 260 or concurrent enrollment
 Introduces Local Area Networking. Focuses on discussions and demonstrations of planning, installing, and supporting networks.

CNG 104 Introduction to TCP/IP

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: CNG 101 or concurrent enrollment
 Outlines four important networking architectures in corporate environments today - TCP/IP, SNA, AppleTalk, and DNA. Focuses on the major components and functions of each of these architectures as well as methods used to connect different architectures. Provides students with concepts that are important to the field of systems integration, as well as a conceptual basis for understanding network architectures.

CNG 108 Network Analysis & Design

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: CNG 101, CNG 102, CNG 104
 Provides advanced instruction for networking professionals and students who grasp the basic concepts of networking but would like to understand methods used to analyze, design, and manage LAN's point-to-point networks. Exercises are geared toward learning techniques used to design and analyze networks.

CNG 121 Computer Technician I: A+

4 Credit Hours • 60 Contact Hours (Lecture)
 Provides students with an in-depth look at personal computer hardware, introduces networking concepts, and covers operational procedures and troubleshooting, all of which are necessary for a successful entry-level computer service technician position. Provides extensive hands-on work with computer systems, PC setup and configuration, and basic maintenance and troubleshooting. This course helps prepare you for the first CompTIA A+ Exam.

CNG 122 Computer Technician II: A+

4 Credit Hours • 60 Contact Hours (Lecture)
 Provides students with an in-depth look at Operating System support, maintenance, and troubleshooting, and an overview of hardware, security concepts, and interpersonal skills, all of which are necessary for a successful entry-level computer service technician position. Provides extensive hands-on work with Windows 2000 and/or XP, including using common GUI and command line tools, registry editing, System backup and Recovery, Networking, and O.S. Troubleshooting. This course helps prepare you for the CompTIA A+ 602 Exam.

CNG 132 Network Security Fundamentals

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: CNG 101 & CNG 104, or CNG 260
 Delivers a comprehensive overview of network security, including general security concepts. Communication Security is studied, including remote access, e-mail, the Web, directory and file transfer, and wireless data. Common network attacks are introduced. Cryptography basics are incorporated, and operational/organizational security is discussed as it relates to physical security, disaster recovery, and business continuity. Computer forensics is introduced.

CNG 257 Network Defense & Counter Measures

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: CNG 132
 Examines the tools, techniques and technologies used in the technical securing of information assets. This course provides in-depth information of the software and hardware components of Information Security and Assurance. Topics include firewall configurations, hardening Unix and NT servers, Web and distributed systems security and specific implementation of security modes and architectures. The curriculum maps to the Security Certified Network Professional (SCP) Network Defense and Countermeasures exam.

CNG 260 Cisco Network Associate I

5 Credit Hours • 75 Contact Hours (Lecture)

Introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. Includes IP addressing and fundamentals of Ethernet concepts, media and operations.

CNG 261 Cisco Network Associate II

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: CNG 260, or CNG 101 and CNG 104

Introduces the architecture, components, and operations of routers and switches.

CNG 262 Cisco Network Associate III

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: CNG 260, CNG 261

Explores the architecture, components and operations of routers and switches in a large and more complex network with advanced functionality.

CNG 263 Cisco Network Associate IV

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: CNG 260, CNG 261; CNG 262 or concurrent enrollment

Implements WAN technologies and network services required by converged applications in a complex switched and routed networks.

CNG 270 Cisco Certified Network Associate, Security

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: CNG 260, CNG 261

Provides core and advanced security concepts and skills for Cisco networks.

CNG 280 Internship

3 Credit Hours • 135 Contact Hours (Internship)

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

Computer Information Systems Courses**CIS 101 Alternative Input/Output for Computers**

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Focuses on teaching alternative methods for interacting with a computer. Individualized for each student, the course covers such programs as Dragon NaturallySpeaking, Dragon Dictate, or Job Access with Speech (JAWS). It is designed for students who have little or no previous computer experience.

CIS 102 Computer Assistive Technology

3 Credit Hours • 45 Contact Hours (Lecture)

Note: Must have faculty consent to enroll

Introduces assistive technology and alternative methods for utilization of computer systems. Depending upon student need or interest, the student selects the assistive technology or method. Options include voice recognition, screen readers, screen enlargement, keyboard modification, word predication, reading enhancement programs and alternative data entry methods.

CIS 104 Word Processing with Assistive Technology

3 Credit Hours • 45 Contact Hours (Lecture)

Note: Must have faculty consent to enroll

Provides training in the functions, features, and uses of assistive technology and alternative methods. Covers the introduction of standard word processing features needed for proper presentation of college or business papers and the methodology

to successfully use the assistive technology/alternative method in continuing educational or employment environments.

CIS 110 Introduction to Computing Technology: (device)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Introduces basic computing technology with an emphasis on document creation and storage. Use of technology for email, web surfing, and access to course materials is included.

CIS 115 Introduction to Computer Information Systems

3 Credit Hours • 45 Contact Hours (Lecture)

Provides an overview of computer information systems and their role in society. This course emphasizes terminology and the identification of computer components and systems used in personal and business environments. This course discusses the evaluation of systems and measures that can be applied to protect them.

CIS 118 Introduction to PC Applications

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces basic computer terminology, file management, and PC system components. Provides an overview of office application software including word processing, spreadsheets, databases, and presentation graphics. Includes the use of a web browser to access the Internet.

CIS 124 Introduction to Operating Systems

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces concepts, terminology, and hands-on skills in the use of DOS and Windows. Emphasizes navigation, file manipulation, file creation, and troubleshooting.

CIS 128 Operating System: Using _____

3 Credit Hours • 45 Contact Hours (Lecture)

Note: Adequate keyboarding skill is essential if you wish to complete assignments in a timely, efficient manner. Students may wish to enroll in BTE 100 Computer Keyboarding to develop keyboarding skill.

Introduces the purpose, function, and configuration of an operating system. Skills covered will include the ability to write scripts, modify configurations, modify environment settings, and configure interfaces.

CIS 130 Introduction to Internet

1 Credit Hour • 15 Contact Hours (Lecture)

Enhances the student's knowledge of the Internet and its resources. Individuals learn terminology in dealing with the Internet. Includes privacy and copyright issues with information retrieved from the Internet. Students experience the use of e-commerce, multimedia, and e-mail. Explores searching the Internet and credibility of information obtained with searches.

CIS 135 Complete Word Processing (Software Package)

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces basics of word processing software to create, edit, format, and print documents as well as advanced features to enhance documents. This course includes working with images, creating/using styles, formatting multi-page documents using advanced features of headers/footers and section breaks, integrating software to create and format tables and charts, using mail merge, and creating documents with columns.

CIS 140 Microsoft Outlook

1 Credit Hour • 15 Contact Hours (Lecture)

Introduces the functions used in Microsoft Outlook including e-mail messages, calendar, contacts, tasks, journals, and notes.

CIS 145 Introduction to Desktop Database

3 Credit Hours • 45 Contact Hours (Lecture)

Explores an array of database skills. Includes table, query, form, and report creation and modification. Also includes application integration.

CIS 155 Complete Spreadsheets: (Software Package)

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces basic to advanced features of spreadsheet software to design and create accurate, professional worksheets for use in business and industry. The course includes entering data, creating formulas, professional formatting, creating charts, creating, sorting and filtering tables, creating and using templates, applying built-in functions, creating pivot tables, applying "what-if analysis" with data tables, creating macros, and using solver features.

CIS 165 Complete Presentation Graphics

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the creation of presentation slides utilizing graphics, visual elements, and media. Utilizes software to display information and communicate a message. Emphasizes proper presentation skills and techniques.

CIS 202 Automated Project Management

3 Credit Hours • 45 Contact Hours (Lecture)

Provides an in-depth exploration of project management concepts and techniques. This course uses software to create project plans and manage projects. Critical thinking, planning, and communication to achieve a project goal are emphasized.

CIS 204 Customization of Assistive Technology

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: CIS 104 or concurrent enrollment, and faculty consent

Provides training in the customization of computer assistive technology and alternative methods. Includes individualized set up features specific to the assistive technology or alternative method and the individual. Covers program features or methods needed for use in database programs, spreadsheets, email, and the internet. Examines individual macros and commands to enhance usage.

CIS 223 Linux

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: CIS 124

Introduces students to the concepts of installing, configuring, and managing the Linux operating system. Topics covered include working with various desktops, use of file system commands, and management of user and group permissions.

CIS 240 Database Design & Development

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the basic concepts of relational databases, data storage, and retrieval. Covers database design, data modeling, transaction processing, and introduces the Structured Query Language for databases.

CIS 243 Introduction to Structured Query Language (SQL)

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces Structured Query Language (SQL) including creation of database structures and how to store, retrieve, and manipulate data in a relational database. This course also covers creating tables and views, using indexes, and developing stored procedures and triggers.

CIS 263 PC Help Desk Skills

3 Credit Hours • 45 Contact Hours (Lecture)

Enables the student to understand and develop appropriate help-desk techniques. Includes roles of help-desk personnel, and how to troubleshoot hardware and software problems.

CIS 267 Management of Information Systems

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the concepts and techniques of managing computer-based information resources. Includes hardware, software, personnel, control techniques, and the placement and integration of information systems resources within the organization.

CIS 268 Systems Analysis & Design I

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the student to the materials, techniques, procedures, and human interrelations involved in developing computer information systems. Includes the systems approach, fact gathering techniques, forms design, input/output, file design, file organization, various charting techniques, system audits on controls, project management, implementation, and evaluation.

CIS 280 Internship

3 Credit Hours • 135 Contact Hours (Internship)

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

CIS 288 Practicum

1 Credit Hour • 45 Contact Hours (Practicum)

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

CIS 289 Capstone

3 Credit Hours • 45 Contact Hours (Lecture)

Serves as the capstone course for CIS majors. Incorporates projects that allow students to develop advanced techniques and assemble information from different courses. Most projects will include the creation of interactive application programs for the non-computer user and require research beyond the classroom to prepare the student for entry level employment in a variety of situations.

Computer Science Courses

CSC 105 Computer Literacy

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces students to current technologies. Special focus on ensuring students become technologically competent and computer literate. Emphasis is placed on technology fundamentals and terminology through the evaluation of hardware and software. Provides students with a working knowledge of operating system use, file management and security. Introduces the internet as a research and communication tool. Application software is covered to ensure the fundamental computer skills for personal, academic and business use are obtained.

CSC 119 Introduction to Programming: (Programming Language)

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Focuses on a general introduction to computer programming. This course emphasizes the design and implementation of structured and logically correct programs with good documentation. It is centered on basic programming concepts, including control structures, modularization, and data processing. A structured programming language is used to implement program designs. It emphasizes the writing of multiple programs following the software development process, from start to finish, including design, implementation, and testing.

CSC 120 Problem Solving with (Software Package)

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)
Provides an introductory level course in computer programming using a high-level programming language. The course will cover design and development of simple software applications. Topics covered will include design of software from initial phase through coding phase, input and output of data, functions or methods, control structures, arrays and error handling.

CSC 126 Game Design & Development

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)
Combines problem-solving techniques with computer game design and implementation to introduce the student to basic gaming and computer science concepts. Students design, implement, and test computer games using software that allows for basic game creation through a wide variety of game creation tools; no prior programming experience is required.

CSC 129 Introduction to Secure Coding

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)
Prerequisite: CSC 119
Focuses on introduction to secure coding. Emphasizes concepts, principles, best practices of structured secure programs within security standards. Analysis of design of secure programming is stressed, including costs, threats, security concepts, policies, coding flaws, vulnerabilities, exploits and code mitigation. Analysis of the design of legacy and contemporary object-oriented languages is emphasized. Focuses on the application of secure coding principles, standards to resolve code flaws and vulnerabilities.

CSC 160 Computer Science I: (Language)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)
Prerequisite: CSC 119, MAT 121
Introduces students to the discipline of computer science and programming. Algorithm development, data representation, logical expressions, sub-programs and input/output operations using a high-level programming language are covered. Intensive lab work outside of class time is required.

CSC 161 Computer Science II: (Language)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)
Prerequisite: CSC 160
Continues algorithm development and problem-solving techniques not covered in Computer Science I using a high-level programming language. Students are able to gain experience in the use of data structures and the design and implementation of larger software projects. Intensive computer laboratory experience is required for this course.

CSC 217 Advanced Python Programming

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)
Prerequisite: CSC 119
Continues program development and problem solving not covered in CSC119: Introduction to Programming. Students will create larger programs in the areas of advanced expression, iterator objects, parsing, and GUI applications.

CSC 220 Introduction to Microsoft Visual Basic.NET

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)
Provides students with the knowledge and skills needed to develop applications in Microsoft Visual Basic .NET for the Microsoft .NET platform. Focuses on user interfaces, program structure, language syntax, and implementation details. This is the first course in the Visual Basic .NET curriculum and serves as the entry point for other .NET courses.

CSC 225 Computer Architecture/Assembly Language Programming

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)
Prerequisite: CSC 160
Introduces concepts of computer architecture, functional logic, design, and computer arithmetic. Focuses on the mechanics of information transfer and control within a computer system. Includes symbolic programming techniques, implementing high level control structures, addressing modes and their relation to arrays, subprograms, parameters, linkage to high level languages, and the assembly process.

CSC 230 C Programming: Platform

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)
Prerequisite: CSC 160, MAT 121
Prepares students to be a better programmer using the C programming language. C is a mid-level language whose economy of expression and data manipulation features allows a programmer to deal with the computer at a low level. The goal is to learn skills that are usable in many languages and understand what is happening at the machine level. The student should already understand the control structures selection, iteration, and subroutines (functions/methods).

CSC 233 Object-Oriented Programming: (Language)

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)
Prerequisite: CSC 160
Provides students will the skills in Programming in an OOP language at an Advanced Level. It covers all syntactical components of an object-Oriented language. Emphasizes inheritance, overloading, and polymorphism. Focuses on writing clear, properly structured, and well documented programs using Object-Oriented methodology. Large programs using multiple data structures will be written, preferably working in large groups.

CSC 236 C# Programming

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)
Prerequisite: CSC 160
Introduces the C# programming language. This course covers all syntactical components of the language including arrays, structures, methods and classes. Content will focus on writing clear, properly structured, and well-documented programs using object-oriented methodology, .NET Framework, and the Visual Studio environment.

CSC 240 Java Programming

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)
Prerequisite: CSC 160
Introduces the Java Platform, Standard Edition (Java SE), to develop Graphical User Interface (GUI) applications. Language constructs will include loops, conditionals, methods, and arrays. The code will incorporate event and exception handling, File I/O, and Object-Oriented Programming (OOP) concepts.

CSC 241 Advanced Java Programming

3 Credit Hour • 45 Contact Hours (Lecture)
Prerequisite: CSC 240
Covers advanced programming topics including multi-threading, network/internet programming, database programming, and JavaBeans. This course focuses on writing Java Enterprise Edition (Java EE) complex programs.

CSC 245 Secure Software Development: (Language)

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)
Prerequisite: CSC 129, MAT 121 or concurrent enrollment
Focuses on functionality when implementing security consequences with regard to formatted output and arithmetic operations in a program. The course introduces how to write a

program that creates safe, reliable, and secure systems free from undefined program behaviors and exploitable vulnerabilities.

CSC 246 Mobile App Development: (Platform)

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Prerequisite: CSC 160 or CSC 240

Learn how to develop mobile apps using key features and frameworks. Students will learn application design and development using a mobile development platform software development kit (SDK) and corresponding programming language. Main features include: handling UI triggered and touch events, data management, simple and complex UI views, drawing, location and application settings.

CSC 267 Object-Oriented Analysis & Design

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: CSC 160

Teaches the student practical methods for analyzing business problems and designing large-scale software solutions. Making use of object-oriented techniques, tools, and methodologies, with an in-depth focus on the Unified Modeling Language.

CSC 280 Internship

2 Credit Hours • 90 Contact Hours (Internship)

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

Computer Web-Based Courses

CWB 110 Introduction to Web Authoring

3 Credit Hours • 45 Contact Hours (Lecture)

Explores the complete set of web authoring skills using HTML and/or other languages. The course covers links, backgrounds, controlling text and graphic placement, tables, image maps, and forms.

CWB 125 Introduction to Scripting: (Language)

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

This course introduces the student to the more common scripting languages used in web development. This allows for the development of dynamic, interactive and responsive web pages. Both client-side and server-side scripting is introduced. Using topics learned in this course, the student will be able to develop web pages that look, feel and have the usability of desktop applications.

CWB 130 Web Editing Tools

3 Credit Hours • 45 Contact Hours (Lecture)

Teaches the use of tools for Web page design and development. These tools are designed to make the creation of Web pages easy and consistent. With the use of editing tools, students will be able to build Web pages making use of forms, tables, frames, templates, Cascading Style Sheets (CSS), and layers. The student will also be able to easily publish and manage a Web site once it is created.

CWB 164 Structured Information Creation: (Language)

3 Credit Hours • 45 Contact Hours (Lecture)

Explores the complete set of web authoring skills using a structured web information language and/or other scripting languages. Course content also includes links, backgrounds, controlling text and graphic placement, tables, image maps, frames and form.

CWB 221 Technology Foundations for E-Commerce

3 Credit Hours • 45 Contact Hours (Lecture)

Provides the student with thorough knowledge of e-commerce architecture, relational database management systems, and HTML and Network fundamentals.

Construction Technology Courses

CON 120 Building Materials & Environmental Impact

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 157

Examines the qualities, uses and characteristics of wood, building materials, lumber, grading and defects of hard and soft woods, estimating, ordering, pricing, fasteners, adhesives, manufactured wood products, steels, vinyl and aluminum and their applications in construction process. Explores Built-Green products and their characteristics.

CON 130 Blueprint Reading

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 157

Focuses on the techniques for reading and using blueprints and specifications with an emphasis placed on those drawing and types of information that are relevant to the construction craft.

CON 138 Plumbing & Electric Fundamentals

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAR 104 or concurrent enrollment

Introduces the fundamentals of plumbing and electric principles and practices in residential application to include safety, print reading and specification, codes, tools, equipment, materials, fixtures, processes, organizations, and career opportunities. It is intended to familiarize the student with entry level terms and processes of both trades.

CON 142 International Residential Code (IRC)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Covers requirements of the major systems of residential building construction (other than commercial). This course includes administration, definitions, building planning, foundations, floors, wall construction, wall covering, roof-ceiling construction, roof assemblies, chimneys and fireplaces, energy efficiency, mechanical systems, plumbing systems, electrical systems, and referenced standards.

CON 147 Field Engineering I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 157

Provides students with an understanding of the basic skills required to perform entry level field engineering tasks in the construction industry. Course focuses on providing students with an opportunity to operate surveying equipment currently in use in the field; perform data collection and record keeping according to industry standards; and apply basic math and measuring techniques to structure and site layout tasks.

CON 152 National Center for Construction Education & Research Masonry I

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 157

Introduces the NCCER Masonry level one for the construction trades to include the fundamentals of basic masonry materials, equipment and tools, mathematical concepts used to calculate masonry units, specifications, codes, mortar, installation techniques, safety, and the career of masonry.

CON 153 National Center for Construction Education & Research Masonry II

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 152, CON 157

Introduces the NCCER Masonry level two for the construction trades to include residential plans and drawing interpretation, residential masonry, reinforced masonry, masonry openings and metal work, advanced laying techniques, effects of climate on masonry, and construction inspection and quality control.

CON 154 National Center for Construction Education & Research Masonry III

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 152, CON 153, CON 157

Introduces the NCCER Masonry level three for the construction trades to include elevated masonry, specialized materials and techniques, repair and restoration, commercial drawings, estimating, site layout, distance measurement and leveling, and stone masonry.

CON 155 National Center for Construction Education & Research Masonry IV

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 154

NCCER Masonry level four requirements for the construction trades to include residential and commercial drawings, specialized materials, and techniques for arches, spiral piers, reinforced masonry, custom masonry, quoined corners, and fireplaces and chimneys. This course covers the coefficient of expansion of materials, vapor barrier and flashing, and the fundamentals of crew leadership and project management.

CON 157 National Center for Construction Education & Research Core

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

Introduces the fundamentals for all construction trades to include basic construction site safety, introduction to construction math, introduction to power tools, introduction to construction drawings, basic communication skills, basic employability skills, and introduction to material handling. This course is designed as an entry level course for any of the building trades program specialties.

CON 158 National Center for Construction Education & Research Carpentry I

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Introduces foundational level carpentry skills, basic residential construction systems, the importance of personal and workplace safety, and the role of carpenters within the construction industry.

CON 159 National Center for Construction Education & Research Carpentry II

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 157, CON 158

Introduces the NCCER Carpentry level two for the construction trades to include commercial drawings, cold-formed steel framing, exterior finishing, thermal and moisture protection, roofing applications, doors and door hardware, drywall installation, drywall finishing, suspended ceilings, window, door, floor, ceiling trim, and cabinet installation.

CON 160 National Center for Construction Education & Research Carpentry III

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 157, CON 158, CON 159

Introduces the NCCER Carpentry level three for the construction trades to include commercial properties of concrete, rigging equipment, rigging practices, trenching and excavating,

reinforcing concrete, foundations and slabs-on-grade, vertical formwork, horizontal formwork, handling and placing concrete, and tilt-up wall systems.

CON 161 National Center for Construction Education & Research Carpentry IV

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 157, CON 158, CON 159, CON 160

Introduces the NCCER Carpentry level four for the construction trades to include site layout differential leveling, site layout angular and distance measurement, advanced roof systems, advanced wall systems, advanced stair systems, introduction to construction equipment, introduction to oxyfuel cutting and arc welding, site preparation, and fundamentals of crew leadership. This course is designed as the fourth level of the building trades carpentry program.

CON 162 National Center for Construction Education & Research Electrical I

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 157

Introduces the fundamentals of electrical trades and practices in residential application. Topics in this course include orientation to the electrical trade, electrical safety, basic electrical circuits, electrical theory, introduction to the National Electrical Code, device boxes, raceways and fittings, conductors and cables, basic electrical construction drawings, residential electrical services, electrical test equipment, and basic installation techniques.

CON 163 National Center for Construction Education & Research Electrical II

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 157, CON 162

Introduces the fundamentals of electrical trades and practices in residential application to include alternating current, theory and application, electric lighting, conduit bending, pull and junction boxes, conductor installations, cable tray, conductor terminations and splices, grounding and bonding, circuit breakers and fuses, and control systems and fundamental concepts.

CON 164 National Center for Construction Education & Research Electrical III

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 157, CON 162

Introduces the fundamentals of electrical trades and practices in residential application. Topics covered include load calculations for branch and feeder circuits, conductor selection and calculations for installation, practical applications of lighting, hazardous locations, overcurrent protection, distribution equipment, transformers, commercial electrical services, motor calculations, voice, data, and video systems, and motor controls.

CON 165 National Center for Construction Education & Research Electrical IV

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 157, CON 162, CON 163, CON 164

Introduces advanced practices in residential and commercial applications for the electrical trades professional. Topics covered include load calculations for feeders and services, applications specific to health care facilities, standby and emergency systems, basic electronic theory, considerations for fire alarm systems, installing specialty transformers, advanced controls, Heating, Ventilation, and Air Conditioning (HVAC) controls, heat tracing and freeze protection, motor operation and maintenance, medium-voltage terminations/splices, and applications for special locations.

CON 166 National Center for Construction Education & Research Plumbing I

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 157

Introduces common types of piping, their proper fitting, fixtures, and distribution systems. Topics include the plumbing trade and construction drawings; plastic, copper, cast-iron, and carbon steel piping; fixtures and faucets; introduction to Drainage, Waste, and Vent (DWV) systems; and water distribution systems.

CON 167 National Center for Construction Education & Research Plumbing II

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 157, CON 166

Builds on concepts and practices for plumbing to include offsets around obstructions, reading commercial drawings, installing and testing Drainage, Waste, and Vent (DWV) piping systems, installing roof, floor, area drains, servicing various types of valves, installation of fixtures, faucets, hot water systems, and a discussion on fuel systems.

CON 168 National Center for Construction Education & Research Plumbing III

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 157, CON 166, CON 167

Introduces the fundamentals of plumbing trades and practices in residential application to include applied math, sizing and protecting the water supply system, potable water Supply treatment, types of venting, sizing, Drain, Waste, and Vent (DWV) and storm systems, sewage sumps and sump pump, corrosive-resistant waste piping, compressed air, and service plumbing.

CON 169 National Center for Construction Education & Research Plumbing IV

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 157, CON 166, CON 167, CON 168

Teaches concepts and practices essential to competitive and successful plumbing businesses. This course also includes business principles for plumbers, introductory skills for the crew leader, water pressure booster and recirculation systems, indirect and special waste, hydronic and solar heating systems, and practices for plumbing.

CON 207 Light Construction Equipment

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Covers construction equipment, and cost choices based upon size of job vs. cost of equipment rental or ownership. Course covers maintenance issues associated with various equipment and specialization.

CON 280 Internship

0-12 Credit Hours • 45 Contact Hours per Credit Hour (Internship)

Note: Department Chair Approval

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

CON 289 Capstone: Construction

0-12 Credit Hours • 45 Contact Hours per Credit Hour (Internship)

Note: Department Chair Approval

Provides a demonstrated culmination of learning within a given program of study.

Counseling Courses**CSL 245 Professional Ethics I**

1 Credit Hour • 15 Contact Hours (Lecture)

This course focuses on ethical issues specific to the practice of addiction counseling and on jurisprudence, which is the law and the practice of psychotherapy in Colorado. The class will cover the Colorado Mental Health Practice Act and introduce the student to the regulatory system and the role of DORA (Dept. of Regulatory Agencies) and DBH (Division of Behavioral Health) in the development and credentialing of the addiction counselor. There will be emphasis on developing ethical decision-making skills, knowledge of confidentiality and the prohibited activities in the Mental Health Practice Act. Students will become familiar with the NAADAC Code of Ethics and acquire the tools for ethical and legal practice.

CSL 250 Motivational Interviewing I

1.5 Credit Hour • 22.5 Contact Hours (Lecture)

Provides the opportunity for students to learn both the model of Motivational Interviewing as well as the underlying Stages of Development model. Discussion of the populations of clients where these models have proven most effective will be discussed. Student opportunity for skills practice during class that includes skill sets specific to each stage of client readiness will be used. Presentation of assessment instruments to evaluate client readiness for change.

CSL 251 Pharmacology I for Addictions Counselors

1 Credit Hour • 15 Contact Hours (Lecture)

This class will provide a solid base of knowledge about the drugs of abuse including what is happening in human physiology and behaviors and will enhance the ability of the counselor to offer treatment services in a manner that respects gender, race and ethnicity, sexual orientation, cultural, familial, systemic and socioeconomic diversity.

CSL 252 Pharmacology II for Addictions Counselors

1 Credit Hour • 15 Contact Hours (Lecture)

Focuses on the pharmacology of alcohol and drugs such as stimulants, nicotine, cannabis, hallucinogens, designer drugs, over the counter medications, and medications for psychiatric illnesses. When combined with CSL 251, this course meets the pharmacology training requirement for the Counselor II level of the Colorado Alcohol and Drug Abuse Program.

CSL 253 Cognitive Behavior Therapy

1 Credit Hour • 15 Contact Hours (Lecture)

Opportunity for students to learn the model of Cognitive Behavior Therapy as it applies to addiction. Discussion of the populations of clients where this model has proven most effective. Opportunity for skills practice during class that includes clinical feedback.

CSL 254 Trauma Informed Care

1 Credit Hour • 15 Contact Hours (Lecture)

Covers the concept of trauma-informed care, an approach being adopted within human services based upon an increased awareness of the ways trauma impacts functioning. Course will define what trauma informed care is and ways a traditional treatment setting can be modified to increase the sense of safety experienced by clients. Participants will learn how to incorporate trauma-informed practices into treatment with diverse populations, such as military veterans, women, and people with co-occurring disorders.

CSL 255 Infectious Diseases for Addiction Counselors

1 Credit Hour • 15 Contact Hours (Lecture)

This class will help prepare addiction professionals to identify diseases frequently associated with drug abuse, determine client risk for infection, educate clients about disease prevention and treatment options, and assist clients in obtaining appropriate treatment as needed. This class will enhance the ability of the counselor to offer treatment services in a manner that respects gender, race and ethnicity, sexual orientation, cultural, familial, systemic and socioeconomic diversity.

CSL 256 Co-Occurring Disorders

1 Credit Hour • 15 Contact Hours (Lecture)

Presents the basics of working with clients with co-occurring mental health and substance abuse disorders. This class will address clinical assessment, treatment philosophy, strategies, and guidelines to provide integrated treatment with co-occurring disorders. It will include an introduction to the diagnostic criteria for the mental disorders most often seen with substance use disorders. The essential values, attitudes, and competencies of the counselor working with this population are discussed.

CSL 257 Professional Ethics II

1 Credit Hour • 15 Contact Hours (Lecture)

Provides participants with an overview of ethical and risk management issues related to addiction treatment services with an emphasis on professional conduct, professional boundaries, boundary crossings, boundary violations, dual relationships and an appropriate use of counselor self-disclosure. Class will focus on issues of professional distance, modeling and maintaining healthy therapeutic boundaries. The ethics of delivering professional counseling to persons of culturally diverse backgrounds will be discussed along with issues of professional readiness and professional development.

CSL 258 Group Counseling Skills

1.5 Credit Hour • 22.5 Contact Hours (Lecture)

Provides students with the skills that allow one therapist to facilitate a group process that help a number of clients simultaneously and provides positive peer support and pressure for recovery. This class will help the student understand the use of group therapy and be able to demonstrate the skills necessary to facilitate a therapy group. The class will focus on group process and discuss diversity within groups, as well as challenges for group leaders.

CSL 260 Client Records Management

1 Credit Hour • 15 Contact Hours (Lecture)

This class will provide the counselor with an understanding of the clinical record and the continuum of client care that the record documents and tracks. The class presents screening, assessment and evaluation, diagnosis, ASAM patient placement criteria, treatment planning, progress note completion, documentation requirements and discharge planning. It emphasizes the confidentiality of the client record and includes releases of information, mandatory disclosure and informed consent among others.

CSL 265 Culturally Informed Treatment

1 Credit Hour • 15 Contact Hours (Lecture)

This class will provide a basic foundation for understanding how cultural competence, awareness and sensitivity can improve quality of care and increase positive outcomes. Cultural variables to be considered will include age, gender, sexual orientation, religious affiliation, language, educational level, physical ability, economic status and social class as well as racial and ethnic backgrounds. This course is intended to provide participants with

basic skills to recognize and respect the behavior, ideas, attitudes, values, beliefs, customs, language, rituals, ceremonies and practices characteristic of diverse groups of people. Course design will include definitions and descriptions of culture including concepts of assimilation and acculturation. Exercises will involve self-examination and discussion of the evolution of one's own personal beliefs, values and attitudes.

CSL 268 Addictions Counseling Skills

1.5 Credit Hour • 22.5 Contact Hours (Lecture)

This class will provide a framework and counseling model for working with clients with substance abuse or dependence. This course will teach the counseling skills needed to help clients process their information and move toward the change process. The models utilized in this class are client-centered, counselor-directed therapy using a motivational style and spirit.

CSL 269 Principles of Addictions

1.5 Credit Hour • 22.5 Contact Hours (Lecture)

Focuses on the major theories of addiction in an historical and theoretical context. Includes an elaboration on NIDA Principles of Drug Addiction Treatment. This class meets the principles of addictions training requirement for the Counselor I level of the Colorado Alcohol and Drug Abuse Program.

Criminal Justice Courses

CRJ 110 Introduction to Criminal Justice: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the basic components of the criminal justice system in the United States. Concepts of crime, crime data, victimization, perspectives and views of crime, theory, and law are discussed. Particular attention to the criminal justice process, interaction and conflict between criminal justice agencies, and current criminal justice issues are examined.

CRJ 111 Substantive Criminal Law

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: CRJ 110

Teaches legal definitions of crime, purposes and functions of the law, historical foundations, and the limits of the criminal law.

CRJ 112 Procedural Criminal Law

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: CRJ 110

Covers constitutional and procedural considerations affecting arrest, search and seizure, post-conviction treatment, origin, development, philosophy, and constitutional basis of evidence. Focuses on degrees of evidence and rules governing admissibility, judicial decisions interpreting individual rights, and an analysis of case studies from arrest through final appeal.

CRJ 125 Policing Systems

3 Credit Hours • 45 Contact Hours (Lecture)

Examines policing in the United States, including: historical foundations, emerging issues, and the relationship between law enforcement and the community. The various types of law enforcement agencies, their administrative practices, and the behavior of those involved in the delivery of police services are examined from the perspective of democratic values, racial and ethnic diversity, and societal perceptions of police effectiveness. Career requirements, including current and future trends, are also presented.

CRJ 127 Crime Scene Investigation

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Focuses on basic procedures in crime scene management to include photography and preparing initial reports and sketches. Includes processing evidence and related criminalistic

procedures. Covers interviewing suspects, witnesses and victims to include the recording of identifications and descriptions. Incorporates lab and lecture.

CRJ 135 Judicial Function

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: CRJ 110

Provides an overview of the structure and function of the dual American judicial system and the behavior of actors (judges/justices, lawyers, law clerks, interest groups, etc.) within the system. Emphasis is placed on the organization and administration of state and federal courts, criminal court procedures, juries, selection of judges, decision-making behavior of juries, judges and justices, and the implementation and impact of judicial policies.

CRJ 145 Correctional Process

3 Credit Hours • 45 Contact Hours (Lecture)

Examines the history of corrections in America from law enforcement through the administration of justice, probation, prisons, correctional institutions, and parole. This course examines the theories, rationales for punishment, and the political system in which corrections, as a component part of the criminal justice system, needs to operate. The course emphasizes legal, sociological, psychological, and other interdisciplinary approaches that effect the operation of a correctional system.

CRJ 146 Community Based Corrections

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces an analysis of community based correctional programs and procedures. Emphasizes the environment and the relationship to public safety, reintegration, and punishment.

CRJ 205 Principles of Criminal Law

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on common law and statutory law crimes, the Model Penal Code, elements defining crimes and penalties, defenses to criminal accusations, and definitions and distinctions between criminal and civil law.

CRJ 209 Criminal Investigation I

3 Credit Hours • 45 Contact Hours (Lecture)

Covers the function of the preliminary investigation at a crime scene to include securing the scene, crime scene searches, police drawings, and recognition and collection of evidence.

CRJ 210 Constitutional Law

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the powers of government as they are allocated and defined by the United States Constitution. The course includes intensive analysis of United States Supreme Court decisions.

CRJ 211 Criminal Investigation II

3 Credit Hours • 45 Contact Hours (Lecture)

Builds on CRJ 209 with focus on follow-up investigation including an examination of death in all its aspects.

CRJ 212 Criminal Investigation III

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: CRJ 209

Focuses on an in-depth study of the principles of conducting a complete and systematic interview and/or interrogation. Examines the psychological dynamics of persons falsifying information. Includes confessions, undercover operations, surveillance techniques, and survival skills unique to undercover operants.

CRJ 216 Juvenile Law & Procedures

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on an in-depth analysis of the socio-legal operation of the Juvenile Justice System emphasizing the substantive and due

process rights of minors. Includes analysis of legal reasoning underlying the juvenile law as it operates at all levels of government.

CRJ 220 Human Relations & Social Conflict

3 Credit Hours • 45 Contact Hours (Lecture)

Highlights the environmental, organizational, and socio-psychological dimensions of social control. Includes the study of individual attitudes, beliefs, and behavior involved in role conflicts, community relations, and conflict management in the social structure.

CRJ 225 Crisis Intervention

3 Credit Hours • 45 Contact Hours (Lecture)

Provides information and application of crisis theories in working with diverse populations. Examines the interventionist role.

CRJ 230 Criminology

3 Credit Hours • 45 Contact Hours (Lecture)

Provides an introduction to the study of crime, understanding the causes of crime, and examines theoretical frameworks and theories to explain criminal behavior. Examination of the nature of crime, crime victimization, crime patterns, types of crime, crime statistics, and criminal behavior is also included.

CRJ 231 Introduction to Forensic Science & Criminalistics

3 Credit Hours • 45 Contact Hours (Lecture)

Exploration of the fundamentals of forensic science that are essential for gathering evidence at the crime scene and analyzing it in the crime laboratory.

CRJ 235 Delinquent Behavior

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the adolescent who violates social and legal norms and the consequences for the individual and society. Emphasizes the social and psychological factors influencing individual delinquent patterns.

CRJ 236 Criminal Justice Research Methods

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the formulation of research questions covering crime and justice, research designs, data collection, and the interpretation and reporting of these data in criminological and justice-system settings. Course content also includes experimental and non-experimental research designs, probability and non-probability sampling techniques, and construction of scales and indexes for research purposes.

CRJ 245 Interview & Interrogation

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the study of technical and legal approaches used in gathering desired information from victims, witnesses, and suspects. Examines the fundamental characteristics of questioning and the use of psychological influences.

CRJ 257 Victimology

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the student to the role the crime victim plays in the criminal justice system. The traditional response that a crime victim receives from the system will be studied and the psychological, emotional and financial impact these responses have on victimization will be analyzed.

CRJ 268 Criminal Profiling

3 Credit Hours • 45 Contact Hours (Lecture)

Examines the theories of crime causation in relationship to criminal profiling. Studies include the investigation of serial killers, their motivations, behaviors, and identification of psychological and sociological explanations related to criminal acts.

CRJ 280 Internship

3 Credit Hours • 135 Contact Hours (Internship)
Provides placement in the criminal justice field to integrate theory with practice.

Culinary Arts Courses**CUA 100 Culinary Program Fundamentals**

3 Credit Hours • 45 Contact Hours (Lecture)
Trains students in the basic fundamentals of the culinary field. The course will include student overview, training in areas of Management, Culinary Arts, Baking & Pastry. Student will be trained in all areas in order to be successful in both Lecture and Lab courses. Training will include program overviews, safety & sanitation fundamentals, culinary math skills, culinary vocabulary, lab requirements, using online training methods, competitions, basic knife skills, equipment identification and proper usage, professionalism, food service history, kitchen organization, basic principles of cooking, food science, study skills, proper food storage techniques, recipes, cost management, library resources and student learning organizations, scholarships and culinary career opportunities. Students must complete this course with a grade C or higher, prior to advancing in the program.

CUA 101 Food Safety & Sanitation

2 Credit Hours • 30 Contact Hours (Lecture)
Introduces the student to the basic rules of sanitation, food-borne illnesses, safe food temperatures, safe food handling techniques, the HACCP Program, pest control procedures, and local/state health rules and regulations for food service operations. At the completion of the course students take a nationally recognized test from the Education Foundation of the National Restaurant Association. If passed with a score of 75% or more, students receive a Certificate of from the Education Foundation.

CUA 105 Food Service Concepts & Management Skills

3 Credit Hours • 45 Contact Hours (Lecture)
Demonstrates the use of management skills training in the food service industry by use of student interaction research, and also demonstrates the various styles of menu development. Includes basic responsibility for food service personnel in all kitchen positions with emphasis on advertising vs. publicity, job analysis, description specifications, and duty list as related to recruiting and hiring process. Covers application, interview techniques, training, and hiring process. Incorporates preparation of menus for different styles of food service concept establishments.

CUA 120 Wines & Spirits

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Enables students to examine types of beverages and equipment including wines, beers, spirits, bar equipment, and staffing. Covers profitability, marketing, federal and local laws, and service. Focuses on the history of making and processing wines, spirits, and beers.

CUA 125 Introduction to Foods

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Prerequisite: CUA 100, CUA 101
Provides students with the fundamental principles and practices of a commercial kitchen, including safety and sanitation applications, use and care of equipment, tools, utensils and knives, recipe use and conversion, organization of work, and basic cooking methods. Focuses on the fundamental principles and production of stocks, soups, sauces, gravies, and thickening agents. Principles of cold food and non-alcoholic beverage preparation and production in a commercial kitchen. Basic cold food decorative work such as fruit and vegetable garnishes and carvings, terrines, and hors d'oeuvres. Emphasizes the effects of

seasonings and cooking methods of vegetable products and basic hot food preparation. Students prepare breakfast orders similar to those ordered in restaurants with egg cookery and dairy products emphasized.

CUA 127 Soups, Sauces & Consommés

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CUA 100, CUA 101, CUA 125
Covers the preparation of the five mother sauces and small-derived sauces. Enables students to prepare stocks, consommés, emulsified sauces, clear soups, pureed soups, chowders, national and cream soups in a commercial kitchen. Introduces gravies and sauce garnishing.

CUA 129 Center of the Plate

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Prerequisite: CUA 100, CUA 101, CUA 125
Enables the student to plan and prepare a variety of complete meals in a commercial kitchen, focusing on center of the plate entrees including meat, poultry, seafood and vegetarian items. Meat, poultry and seafood handling and preparation, including basic forms and cuts, principles used for selecting products and appropriate cooking methods are emphasized. Vegetarian entrees are also covered, including methods for preparation and cooking of various types of potatoes, rice, legumes, pastas, casseroles and grain products with special attention given to complimentary proteins.

CUA 136 Alcohol & Bartending Management

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: CUA 100, CUA 101
Prepares students for the preparation and service of alcoholic beverages. Focuses on mixology procedures, wine and champagne service, purchasing and storage procedures, cost controls, customer relations, legal responsibilities of lounge operations and ServSafe alcohol practices.

CUA 138 Food & Beverage Service

2 Credit Hours • 30 Contact Hours (Lecture)
Prerequisite: CUA 100, CUA 101, CUA 125, CUA 145
Note: Student must have completed and passed the ServSafe National Exam
Provides the practical skills and knowledge for effective management of food and beverage service in cafeterias, coffee shops, room service, banquet areas and high-check-average dining rooms. The focus is on the need of the customer.

CUA 145 Introduction to Baking

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Prerequisite: CUA 100, CUA 101
Provides the student with the fundamentals of baking terminology, principles of baking, and the characteristics of the functions of the main ingredients that is used in bakery production. Orients student to use commercial equipment, tools, and provides the student with the fundamentals of basic yeast-raised production and quick breads, white bread, rolls, variety grain breads, specialty breads, sweet yeast-raised products, and quick bread, fundamentals of basic cake, pie, pastry, and cookie production. Enables the student to produce a variety of cakes, pies, pastries, cookies, and assorted dessert items in a commercial kitchen.

CUA 150 Baking: Decorating & Presentation

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CUA 145
Examines the preparation and production of cakes, pastries, different styles of decorating, commercial equipment, and types of products used for decoration. Covers the use of plate painting, national products, and designing show pieces.

CUA 151 Baking: Intermediate Bread Preparation

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 145

Focuses on preparation of types of bread products including French, rye, wheat, brioche, and croissants. Enables the student to demonstrate different styles of presentation including rolling, braiding, cloverleaf, parker-house, single knot, butter-flake, comb, and wreath shape. Examines production steps, ingredients, and equipment that apply to course training.

CUA 152 Individual Fancy Dessert Production

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 145

Focuses on the preparation and decoration of individual dessert items. Covers the preparation of cream horns, napoleons, éclairs, cream puffs, marzipan fruits, marzipan sculptures, tarts, flambéed desserts, international desserts, pastry shells, pulled sugar, spun sugar, and individual chocolate decorations. Students research and locate dessert menus/recipes to be used in lab production.

CUA 153 Confectionaries & Petit Fours

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 145

Introduces the art of confections, individual chocolates and petit four cakes production and presentation. Students will learn proper candy production including high altitude preparation, use of chocolate molds, poured candies, centers, taffy, brittle, flavored chocolates, hard rock candies, and various petit fours and garnishes.

CUA 154 Introduction to the Business of Catering

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 100, CUA 101, CUA 125

Provides students with an overview of the catering industry. Special attention will be given to catering from a customer's perspective. Students completing this course should be able to plan and implement a variety of catering functions. Included in the course will be some experiential learning opportunities as a result of participation in actual college catered functions on campus.

CUA 156 Nutrition for the Hospitality Professional

3 Credit Hours • 45 Contact Hours (Lecture)

Provides students with the fundamentals of human nutrition. Focuses on the nutritional needs of humans throughout their life cycle as well as those with special dietary needs. Students may take a nationally recognized test from the Educational Foundation of the National Restaurant Association.

CUA 157 Menu Planning

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the student to planning menus and integrating them into foodservice operations. Equips the student with a working knowledge of the function, mechanics, and results achieved by the menu. Provides an overview of the existing and growing foodservice industry as seen through the menu.

CUA 161 Advanced Cake Decorating – Wedding Cakes

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 150

Demonstrates a variety of wedding cake decorating techniques. We will learn to work with gum paste, rolled fondant, royal icing. Student will complete a two-tier wedding cake.

CUA 190 Dining Room Management

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Focuses on service related skills and knowledge used in the foodservice industry. Enables the student, through a laboratory setting, to practice skills and acquire the knowledge of "front of the house" operations common to dining rooms in the industry. Includes table setting, side work, serving customers, operating a

Point-of-Sale system, hosting and supervising dining room personnel. At the completion of the class, students are able to supervise the operation of a sit-down dining operation. Meets a minimum of 90 hours.

CUA 210 Advanced Cuisine & Gardé Manger

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 129

Focuses on the preparation of food display items for buffets and banquets such as fancy garnishes, fruit and vegetable carvings, canapés, party trays, etc. Includes pates, galantines, terrines, and choud froid items. Incorporates creation of food artistry show pieces meeting competition guidelines developed by the American Culinary Federation. Covers the preparation of a regional, ethnic, or cultural culinary presentation based upon personal research.

CUA 233 Advanced Line Prep & Cookery

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 129

Focuses on preparation of complete meals to order. Emphasizes cooking center of the plate items such as meat, fish, seafood, and poultry as well as accompaniment foods such as starches and vegetables. Enables the student to prepare sauces, entrée salads, edible garnishes, and meals determined by the menu prepared for a dining room setting. Emphasizes line supervisor, sauté cook, pantry cook, cook's helper, and runner responsibilities.

CUA 236 Advanced Baking

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 151, CUA 161

Provides students the opportunity to refine their baking skills in the areas of desserts, yeast breads, garnishing, and presentation of baked products. Enables the student to bake, garnish and present a variety of baked goods. These products are prepared and displayed for the public in various locations in the college.

CUA 245 International Cuisine

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 127, CUA 129

Introduces full meal preparation of non-traditional international cuisine. Ethnic ingredients and meals from India, Thailand, Greece, Morocco, Africa, South America and Ecuador will be introduced.

CUA 255 Supervision in the Hospitality Industry

3 Credit Hours • 45 Contact Hours (Lecture)

Provides the current/future foodservice operator, manager, or supervisor with a solid foundation for developing communication skills, planning and decision-making skills, and skills for creating a goal-oriented environment utilizing management principles in the selection, training, evaluating, delegating, motivating, rewarding, and disciplining employees. Stresses skills for success through people development.

CUA 256 Marketing in the Hospitality Industry

3 Credit Hours • 45 Contact Hours (Lecture)

Involves the student in a study of foodservice marketing including marketing planning, use of marketing information in the foodservice operation, marketing research, understanding foodservice customers, advertising and promotion, hospitality group sales, and menu design and pricing strategies. At the conclusion of this course, the student will take a nationally recognized test and receive a certificate from the Education Foundation of the National Restaurant Association.

CUA 261 Cost Controls

3 Credit Hours • 45 Contact Hours (Lecture)

Provides students with the opportunity to learn the types of costs usually found in the food service industry. Students will learn to apply control techniques to a variety of costs and sales. They will

also learn to interpret a variety of financial reports which reflect the relationship between costs and income. Students may take the national Cost Controls test from the National Restaurant Association Education Foundation. If they pass the test with 75 percent or higher, they will receive a national certificate for the course.

CUA 262 Purchasing for the Hospitality Industry

3 Credit Hours • 45 Contact Hours (Lecture)

Emphasizes controlling costs as applied to the selection and procurement of food and supply items. Covers selection and distribution systems including the forces affecting them. Students will take a nationally recognized test and may receive a certificate from the Education Foundation, the educational arm of the National Restaurant Association.

CUA 263 Legal Aspects of Hospitality Management

3 Credit Hours • 45 Contact Hours (Lecture)

Provides the student with an overview of legal subjects relevant to foodservice. Covers Federal, State, and Local regulations, patron civil rights, liability and safety, laws relating to employment, security, contracts, property rights, franchising, bankruptcy and reorganization, court system and out-of-court settlements, and choosing and managing an attorney.

CUA 264 Sustainable Food Service Operations

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: CUA 105, CUA 115

Students will examine the issues, challenges and opportunities in establishing a sustainable foodservice operation including: economic feasibility, marketing, sourcing of products, seasonal/local menus, minimizing on-site consumption and waste of resources. Students will identify actions that will improve or diminish sustainability in a foodservice operation and how to perform cost/benefit analysis of these actions to maximize effectiveness.

CUA 268 Vegetarian & Dietary Cuisine

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 125, CUA 156

Introduces the student to dietary and environmental sustainability practices to meet the future needs of the food service industry. Employment opportunities include culinary and management careers in the health care industry, institutional operations with special dietary needs, operations that serve high risk populations, and operations that utilize sustainability practices. Students will learn skills and understanding in human nutrition, menu development, cultural cuisines, sustainability practices, dietary cuisine, environmental impacts and concerns, and using the farm to fork concept within the industry. Examinations will be given throughout the program.

CUA 269 Dietary Baking

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 145

Provide the student with the development and production of bakery products that focus on common food allergens, intolerances and health aspects. Students will prepare a variety of gluten free bakery products that address celiac disease, and other products that address common health related issues. There will be an emphasis in the use of product substitutions including: fats, sweeteners, and dairy in baking. Students will also analyze the nutritive value of ingredient refinement.

CUA 281 Internship

4 Credit Hours • 180 Contact Hours (Internship)

Prerequisite: CUA 127

Places students in an actual work situation where they participate in the operation of a foodservice establishment. Hours of work are arranged by the site supervisor and the intern. The number of hours required are determined by the number of credits the course carries.

Dance Courses

DAN 105 Hip Hop Dance I

1 Credit Hour • 30 Contact Hours (Lab)

Introduces basic concepts and skills of hip hop and how it is fused with athleticism. This course will cover the progression of the hip hop dance genre beginning with foundational hip hop vocabulary. The history and culture of this genre are examined. This is a beginning level course.

DAN 106 Hip Hop Dance II

1 Credit Hour • 30 Contact Hours (Lab)

Includes a continuing study of hip hop dance movement and cultural concepts and focuses on advancing technique work and proficiency. This course expands and deepens understanding of vocabulary, choreography, styles of the dance, history, and current trends.

DAN 111 Modern Dance I

1 Credit Hour • 30 Contact Hours (Lab)

Introduces basic concepts and skills of modern dance. Focuses on technique work to improve alignment and increase strength, flexibility, endurance, coordination, rhythm and spatial awareness. Explores dance as a tool for communication and dance as an art form. This is a beginning level course. May be repeated for no more than three credits.

DAN 112 Modern Dance II

2 Credit Hours • 60 Contact Hours (Lab)

Includes a continuing study of modern dance movement concepts. Focuses on advancing technique work and proficiency. Expands and deepens understanding of alignment, strength, flexibility, endurance, coordination, rhythm and spatial awareness. Improvisation may be included. This course is for students who have successfully completed Modern I or have previous dance training. This course may be repeated up to two times for credit.

DAN 113 Modern Dance III

2 Credit Hours • 60 Contact Hours (Lab)

Builds on intermediate skills with more advanced and complex modern dance movement concepts and technique. Expands and deepens understanding of alignment, strength, flexibility, endurance, coordination, rhythm, spatial awareness, dynamics and improvisation. This course is for students who have successfully completed DAN 112: Modern II. This course may be repeated up to two times for credit.

DAN 114 Modern Dance IV

2 Credit Hours • 60 Contact Hours (Lab)

Builds on intermediate/advanced skills with complex technique work and experimentation and emphasis on quality of movement style. Expands and deepens understanding of alignment, strength, flexibility, endurance, coordination, rhythm, spatial awareness, dynamics and improvisation. This course is for students who have successfully completed DAN 113: Modern III and are at an intermediate/advanced level. This course may be repeated up to two times for credit.

DAN 117 Salsa I

1 Credit Hour • 30 Contact Hours (Lab)

Introduces the beginning dancer to popular Salsa steps and dance combinations. This course includes basic partnering concepts and techniques. Dancers will explore rhythm, proper body alignment and music recognition. A partner is not required for this course.

DAN 118 Salsa II

1 Credit Hour • 30 Contact Hours (Lab)

Prerequisite: DAN 117

Continues Salsa I with an increased knowledge of Salsa dance. This course focuses on Salsa dancing in groups of couples with frequent partner exchanges. Dancers learn a more in-depth study of Salsa dance concepts and techniques. A partner is not required for this course.

DAN 121 Jazz I

1 Credit Hour • 30 Contact Hours (Lab)

Introduces the basic techniques and vocabulary of jazz dance and the basic elements of dance. Focuses on movement-oriented dance, comprised of warm-up exercises, center combinations, traveling combinations, and cool down.

DAN 122 Jazz II

2 Credit Hours • 60 Contact Hours (Lab)

Continues Jazz I with an increased knowledge of jazz dance. Enables the student to work at an intermediate level with a basic understanding of body alignment, balance, and musicality.

DAN 123 Jazz III

2 Credit Hours • 60 Contact Hours (Lab)

Builds on skills learned in DAN 122 and incorporates work at an intermediate/advanced level. Expands on jazz dance technique through more challenging movement combinations. Requires knowledge of the learned basics in dance.

DAN 124 Jazz IV

2 Credit Hours • 60 Contact Hours (Lab)

Builds on skills learned in DAN 123 and incorporates work at a more advanced level. Emphasizes more challenging movement combinations and performance techniques.

DAN 125 History of Dance I: AH1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines Western & non-Western dance as an expression of cultural value throughout history from early Renaissance dance through present day dance trends. Attention is given to social, political, economic, environmental, racial and gender effects as it pertains to the historical development of dance forms within societies. Explores how our cultural lens shifts our perception of movement, the body, and our values.

DAN 129 Introduction to Dance

1 Credit Hour • 30 Contact Hours (Lab)

Introduces the art of dance and movement expression from a variety of viewpoints: historical, cultural, aesthetic, critical, and creative. Examines the art and craft of dance as an expression of culture and community while exploring personal expression, imagery, dance techniques, and performance qualities.

DAN 130 Dance Sampler

1 Credit Hour • 30 Contact Hours (Lab)

Introduces the beginning dancer to popular dances through a social dance sampler in Salsa, Swing, and Country Western Dance technique, footwork, body posturing, rhythms, and dance floor etiquette. Examines a variety of dances such as Salsa's Mambo, Cha-Cha, and Rumba; Swing's Lindy Hop (jitterbug); and Country Western's Two Step, Cowboy Waltz, Cotton-Eyed Joe, and various Country Western line dances.

DAN 131 Ballet I

1 Credit Hour • 30 Contact Hours (Lab)

Introduces the basic techniques of ballet, which are built upon knowledge of ballet terminology, fundamental exercises, and the basic elements of dance. Focuses on movement-oriented dance, comprised of stretching, barre warm-up exercises, simple terre-à-terre and jumping steps, and basic extended positions.

DAN 132 Ballet II

2 Credit Hours • 60 Contact Hours (Lab)

Continues Ballet I and emphasizes ballet terminology, fundamental exercises, and the basic elements of dance. Focuses on an intermediate level within the basic structure of the ballet class.

DAN 133 Ballet III

2 Credit Hours • 60 Contact Hours (Lab)

Builds on Ballet II at an intermediate/advanced level. Continues learning within the basic structure of a ballet class while increasing the level of skills through more experience with challenging movement combinations.

DAN 134 Ballet IV

2 Credit Hours • 60 Contact Hours (Lab)

Consists of traditional and contemporary ballet technique with focus on correct body alignment and kinesiology for an increased physical performance. This is not a pointe class.

DAN 141 Ballroom Dance

1 Credit Hour • 30 Contact Hours (Lab)

Introduces the basic terminology, techniques, and routines of several dances from a specific country or region. Focuses on the music, costumes, and customs related to the dances of study. Partners are not required.

DAN 142 Ballroom Dance II

1 Credit Hour • 30 Contact Hours (Lab)

Continues DAN 141 with focus on regional dances, customs, and rhythms. Partners are not required.

DAN 143 Tap I

1 Credit Hour • 30 Contact Hours (Lab)

Introduces basic tap dance movements and techniques. The shuffle, ball change, brush, flap heel drop, stomp, and stamp step are covered.

DAN 144 Tap II

1 Credit Hour • 30 Contact Hours (Lab)

Prerequisite: DAN 143

Continues with the concepts introduced in Tap I including more advanced versions of time steps, drawbacks, and bomber shays. Introduces wings and syncopated pull-backs. Focuses on intricate rhythm patterns.

DAN 150 Dance Appreciation: AH1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces and allows discovery, experience, analyzation, and evaluation of different genres of dance, including but not limited to, music, choreography, costuming, history, and culture.

DAN 151 Belly Dance I

1 Credit Hour • 30 Contact Hours (Lab)

Presents belly dance - the oldest dance form known to humankind and a celebration of life! Emphasizes developing balance and enables the student to perform a belly dance and learn the history of belly dance and costuming techniques.

DAN 152 Belly Dance II

1 Credit Hour • 30 Contact Hours (Lab)

Continues Belly Dance I (DAN 151) with emphasis on coordination and balance and additional techniques. Includes costume design.

DAN 161 African Dance I

1 Credit Hour • 30 Contact Hours (Lab)

Learning traditional dances, rhythms and songs from Guinea West African and surrounding areas should be expected. Students will explore the functions of these dances in relation to contemporary culture. Class warm-up includes working on core strength, flexibility, stamina and rhythmic sensibility. Clothing for the class should be loose. Students may wear a lappa (cloth wrapped around the waist). All dancing is performed barefoot.

DAN 211 Dance Composition & Improvisation I

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Includes creative problem-solving and choreographic exercises to explore the basic elements of dance. The course introduces improvisation and focuses on developing skills in inventing and structuring movement to create original works of choreography.

DAN 212 Dance Composition & Improvisation II

2 Credit Hours • 60 Contact Hours (Lab)

Prerequisite: DAN 211

Further the study of choreographic methods including group work and developing ideas in creating site specific pieces, while continuing to cultivate individual movement style and invention.

DAN 221 Dance Performance I

2 Credit Hours • 60 Contact Hours (Lab)

Note: Must have faculty consent through audition

Includes the ability to rehearse and perform original choreography for performance after selection through audition. Expands and deepens understanding of a professional company atmosphere while focusing on technique. Improvisation may be included. This course may be repeated up to two times for credit.

DAN 222 Dance Performance II

2 Credit Hours • 60 Contact Hours (Lab)

Prerequisite: DAN 221

Includes the ability to rehearse and perform original choreography at an advanced level for performance after selection through audition. Expands and deepens understanding of a professional company atmosphere while focusing on advancing technique and utilizing improvisation in performance. This course may be repeated up to two times for credit.

DAN 224 Dance for Musical Theatre I

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Introduces students to dance within the context of musical theatre. Enables the student to practice non-verbal communication and expressive movement techniques.

DAN 225 Dance for Musical Theatre II

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Prerequisite: DAN 224

Continues DAN 224 with more emphasis on performance.

DAN 226 Pointe

1 Credit Hour • 30 Contact Hours (Lab)

Note: Must have faculty consent to enroll

Emphasizes elementary pointe technique. Most work will be done at the barre stressing the muscular development of the foot, which is necessary before more advanced work can be undertaken.

DAN 227 Pointe II

1 Credit Hour • 30 Contact Hours (Lab)

Note: Must have faculty consent to enroll

Offers a continuation of DAN 226 Pointe I, with emphasis on barre work to strengthen the foot and ankle. Students will gain knowledge and skill leading to the intermediate level.

DAN 251 Belly Dance III

1 Credit Hour • 30 Contact Hours (Lab)

Continues Belly Dance II (DAN 152) with emphasis on coordination and balance and additional techniques. Includes costume design,

fitness, and the emphasis of learning advanced dance techniques to perform professionally.

DAN 253 Belly Dance Performance I

1 Credit Hour • 30 Contact Hours (Lab)

Enables students to participate through rehearsal and performance in a pre-professional Belly Dance performance ensemble. The course will cover the cultural component of belly dance, the business of being a professional belly dance performer in addition to learning various styles of belly dance. Students will perform in various venues including a formal concert setting.

DAN 254 Methods of Teaching Dance

2 Credit Hours • 60 Contact Hours (Lab)

Introduces and develops the skills necessary for learning how to teach dance to children through adults. Fundamental movement principles and the goals/values of dance in education will be examined. Lectures, readings and laboratory teaching experiences will be followed by observation and feedback sessions on practical teaching and lesson planning.

DAN 255 Dance for Camera

2 Credit Hours • 60 Contact Hours (Lab)

Analyzes, discusses and traces the history of Dance for Camera/Screen dance including musicals, art-films and commercial media. Students will get hands-on-training in using the video camera as a two-dimensional stage, progressing to creating their own Dances for Camera. This class will require students to watch and analyze dance media, read and apply historical information discussed in creating their own screen dances, and be actively engaged in class discussions and feedback sessions.

Dental Assisting Courses

DEA 102 Principles of Clinical Practice

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

*Prerequisite: DEA 120, DEA 121 or permission of instructor**Note: Must be taken concurrently with DEA 123; may be taken concurrently with DEA 126*

Includes techniques used in four handed dentistry, instrument identification, and armamentarium for tray set-ups. Covers sterilization and aseptic procedures.

DEA 104 Specialties in Dentistry

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: DEA 120, DEA 121 or permission of instructor

Focuses on armamentarium of specific tray set-ups for periodontics, endodontics, and fixed and removable prosthodontics. Examines pediatric dentistry, oral surgery, and implants. Includes diagnosis, treatment, and the dental assistant's role in each specialty.

DEA 111 Dental Office Management

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: DEA 102, DEA 120, DEA 121, DEA 123, DEA 125, DEA 126, DEA 132**Note: May be taken concurrently with DEA 104, DEA 122, DEA 124, DEA 131, DEA 134*

Includes office management and clerical practices, scheduling appointments, completing daily records, insurance and tax forms, bookkeeping and recall systems, and ordering supplies.

DEA 120 Introduction to Dental Practices

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: College Reading & Writing Literacy**Note: May be taken concurrently with DEA 121*

Includes roles and responsibilities of the dental health team; educational background for the various specialties including general practitioner, hygienist, dental assistant; history, legal implications, ethical responsibilities and the role of professional organizations.

DEA 121 Dental Science I

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Reading & Writing Literacy**Note: May be taken concurrently with DEA 120*

Includes fundamentals of the oral structures as they apply to oral histology, embryology, morphology, pathology, dental anatomy, and dental charting.

DEA 122 Dental Science II

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: DEA 120, DEA 121 or permission of instructor

Includes survey of human anatomy and physiology, the structure of the head and neck as applied to dental assisting, the function of the maxilla and mandible, processes, foramen, sutures, and major nerve and blood supply.

DEA 123 Dental Materials I

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

*Prerequisite: DEA 120, DEA 121 or permission of instructor**Note: Must be taken concurrently with DEA 102. May be taken concurrently with DEA 126.*

Includes fundamentals of dental materials as they apply to clinical and laboratory applications of cements, bases, liners, dental metals, resins, glass ionomers, ceramics and dental abrasives.

DEA 124 Dental Materials II

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: DEA 120, DEA 121, DEA 123, DEA 126

Includes fundamentals of dental materials as they apply to clinical and laboratory applications of hydrocolloid and elastomeric impressions materials, gypsum products, dental waxes, study and final working models, and fabrication of provisional crowns, custom impression trays and bleaching trays.

DEA 125 Dental Radiography

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

*Prerequisite: DEA 120, DEA 121 or permission of instructor**Note: May be taken concurrently with DEA 126*

Focuses on the science of radiography, the application of radiographic techniques, and aseptic techniques.

DEA 126 Infection Control

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: DEA 120, DEA 121 or permission of instructor

Includes basic information concerning infection and disease transmission in the dental office. Emphasizes knowledge of microorganisms, with an emphasis on aseptic techniques, sterilization, and hazardous communication management.

DEA 131 Advanced Dental Radiography

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

*Prerequisite: DEA 120, DEA 121, DEA 125, DEA 126**Note: May be taken concurrently with DEA 122*

Includes theory and techniques of exposing intra-oral and extra-oral radiographs on adults, children, edentulous, and special needs patients. Covers dental anatomy radiographic

interpretation and aseptic techniques. Enables the student to expose radiographs on the x-ray mannequin and patients. Students must be a minimum of eighteen years of age.

DEA 132 Medical Emergencies in the Dental Office

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: DEA 120, DEA 121 or permission of instructor

Includes techniques for taking and reading vital signs. Emphasizes recognition, prevention, and management of medical emergency situations in the dental office. Covers completing and updating patient health history. Addresses pharmacology.

DEA 134 Prevention & Nutrition in Dentistry

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

*Prerequisite: DEA 102, DEA 120, DEA 121, DEA 123, DEA 126**Note: May be taken concurrently with DEA 122*

Emphasizes techniques in preventive dentistry to include application of fluoride, pit and fissure sealants, oral home care instruction, diet counseling and nutrition as it applies to dental health. Covers techniques for coronal polishing, extra-oral and intra-oral examination, and dental charting.

DEA 140 Dental Assisting National Board Review (Elective)

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: DEA 102, DEA 104, DEA 111, DEA 120, DEA 121, DEA 122, DEA 123, DEA 124, DEA 125, DEA 126, DEA 131, DEA 132, DEA 134, DEA 181, or 2 years documented full time dental assisting experience**Note: May be taken concurrently with DEA 182*

Focuses on a review for the Dental Assisting National Board (DANB) Examination.

DEA 181 Clinical Internship I

1 Credit Hour • 45 Contact Hours (Internship)

Note: Must have Program Coordinator's approval to enroll

Provides an opportunity to perform clinical dental assisting skills in a dental office or clinical setting and work toward completing clinical hours required by the Commission on Dental Accreditation (CODA).

DEA 182 Clinical Internship II & Seminar

6 Credit Hours • 270 Contact Hours (Internship)

Prerequisite: DEA 181

Provides an opportunity to perform and advance clinical dental assisting skills in a general dental office, specialty office or clinical setting and work toward completing clinical hours required by the Commission on Dental Accreditation (CODA).

DEA 200 Introduction to Expanded Functions

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: Permission of Program Coordinator. Graduate of a CODA accredited dental assisting program, Certified Dental Assistant, or 2 years of documented full time dental assisting experience

Emphasizes techniques and concepts of expanded functions in dental assisting, including team management, placement and finishing of dental restorative materials, and adjunct procedures necessary to restorative dentistry.

DEA 205 Expanded Functions for the Dental Auxiliary

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: DEA 200

Focuses on clinical application of expanded functions in dental assisting.

Diesel Power Mechanics Courses

DPM 100 Introduction to Diesel Mechanics

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Note: DPM 100 must be taken concurrently with DPM 101

Focuses on the student identifying and describing the many different types of diesel powered vehicles. Emphasis is placed on being able to research information in maintenance manuals and parts manuals along with demonstration of their abilities in properly identifying and select mechanical fasteners for a particular application. Specific coverage of precision fasteners, fuels, fluids as they relate to the diesel industry.

DPM 101 Diesel Shop Orientation

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Note: DPM 101 must be taken concurrently with DPM 100

Focuses on maintaining a safe and clean working heavy duty diesel shop. Emphasis is placed on the proper use and care for hand, electric, air and hydraulic tools safely. Covers how to clean equipment properly, to handle and dispose of hazardous materials correctly, and to apply mandated regulations. Emphasis is also placed on proper lifting equipment.

DPM 103 Diesel Engines I

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101

Covers the theory and operation of diesel engines with emphasis on cylinder heads, valve trains diagnosis, and repair. This course introduces the cooling system's importance in diagnosis and repair. This course meets Medium/Heavy Truck Service Technology/Medium/Heavy Truck Master Service Technology (TST/MTST) program accreditation standards.

DPM 105 Heavy Duty Powertrains I

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101

Focuses on drive axles and universal joints of heavy duty trucks and equipment including operation, testing, removal, inspections, and repair of heavy duty drivelines, axles, and differentials. This course meets the Medium/Heavy Truck Service Technology/Medium/Heavy Truck Master Service Technology (TST/MTST) program accreditation standards.

DPM 106 Diesel Fuel Systems

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101

Note: DPM 106 must be taken concurrently with DPM 210

Covers the theory of operation and repair of fuel injection systems. Provides laboratory assignments that involve disassembly, assembly, and service procedures on fuel system components.

DPM 107 Fundamentals of Four-Wheel & Front-Wheel Drive

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101

Focuses on the operation and repair of four wheel drive and front wheel drive systems.

DPM 111 Cab & Electrical PMI

1.5 Credit Hours • 33.75 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101

Note: DPM 111 must be taken concurrently with DPM 112

Enables the student to perform preventive maintenance on heavy equipment and truck cab and electrical systems, and complete appropriate maintenance records. Addresses the process of diagnostics and troubleshooting. Focuses on the importance of preventive maintenance.

DPM 112 Engine Systems PMI

1.5 Credit Hours • 33.75 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101

Note: DPM 112 must be taken concurrently with DPM 111

Enables the student to perform preventive maintenance on heavy equipment and truck diesel engine systems, and complete appropriate maintenance records. Addresses the process of diagnostics and troubleshooting. Focuses on the importance of preventive maintenance.

DPM 120 Basic Heavy Duty Electricity

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101

Covers basic electrical theory, circuit designs, and wiring methods, multimeter usage, and wiring diagrams including the demonstration of test procedures on electrical circuits. This course meets the Inspection, Maintenance & Minor Repair; Medium/Heavy Truck Service Technology/Medium/Heavy Truck Master Service Technology (IMMR/TST/MTST) program accreditation standards.

DPM 121 Hydraulic Systems I

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101

Offers instruction on the basic fundamentals of hydraulics and their applications. Diagnosis, service, and testing along with safety are stressed within this course.

DPM 122 Hydraulic Systems II

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: DPM 121 or concurrent enrollment

Covers the repair, replacement, measurement, and adjustments of components including pumps, control valves, and cylinders. This course meets the Medium/Heavy Truck Master Service Technology (MTST) program accreditation standards.

DPM 123 Cummins B Series

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101, DPM 103, DPM 106, DPM 203, DPM 210

Covers the history, developments, theory, operation and service procedures of a Cummins B Series diesel engines.

DPM 124 Powerstroke Engines

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101, DPM 103, DPM 106, DPM 203, DPM 210

Covers the history, development, theory, operation and service procedures of Powerstroke Diesel Engines used in Ford Trucks.

DPM 125 Duramax Engines

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101, DPM 103, DPM 106, DPM 203, DPM 210

Covers the history, development, theory, operation and service procedures for Duramax Diesel Engines used in General Motors Trucks.

DPM 126 Heavy Duty Starting & Charging

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101, DPM 120

Covers the operation, testing, maintenance, repair, and servicing of heavy duty vehicle battery, starting and charging systems including voltage drop testing, and load testing. This course meets the Medium/Heavy Truck Service Technology/Medium/Heavy Truck Master Service Technology (TST/MTST) program accreditation standards.

DPM 140 Heavy Duty Steering & Suspension I

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101

Emphasizes lecture and related lab in the diagnosis and service of heavy duty mechanical and air suspension systems, wheels, tires, and pressure management systems.

DPM 170 Lab Experience I

0-12 Credit Hours • Per Credit Hour, 45 Contact Hours (Work Experience)

Note: Must have faculty consent to enroll

Continues to build upon the principles that are expected to be understood by students.

DPM 203 Diesel Engines II

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Lecture/Lab Combination)

Prerequisite: DPM 103 or concurrent enrollment

Covers the operation and repair of diesel engines with emphasis on the cylinder block in big bore engines. This course includes the disassembly, inspection, and reassembly of diesel engines. This course meets the Medium/Heavy Truck Master Service Technology (MTST) program accreditation standards.

DPM 205 Heavy Duty Powertrains II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101

Covers clutch and transmission problems. The course focuses on clutch and transmission operation, testing removal, rebuilding, inspection, and repairing, and replacement. This course meets the Medium/Heavy Truck Service Technology/Medium/Heavy Truck Master Service Technology (TST/MTST) program accreditation standards.

DPM 206 Heavy Duty Brakes I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101

Focuses on the various braking systems incorporated in heavy-duty trucks and heavy equipment including the diagnosis and service of hydraulic, mechanical, and electrical brake components. This course meets the Medium/Heavy Truck Service Technology/Medium/Heavy Truck Master Service Technology (TST/MTST) program accreditation standards.

DPM 207 Heavy Duty Brakes II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 206

Focuses on general service and maintenance procedures for the heavy-duty truck air brake system and related pneumatic components, including operational checks, performance testing, and verifying system compliance with regulations to the Federal Motor Vehicle Safety Standards (FMVSS No. 121). This course meets the Medium/Heavy Truck Service Technology/Medium/Heavy Truck Master Service Technology (TST/MTST) program accreditation standards.

DPM 208 H/D Automatic Trans Diagnosis

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101; DPM 205 or concurrent enrollment

Provides laboratory hands on experiences in the diagnosis of electrically controlled heavy duty transmissions.

DPM 210 Diesel Air Induction & Exhaust

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101

Note: DPM 210 must be taken concurrently with DPM 106

Covers the theory of operation and repair of turbochargers, superchargers, intercoolers, various induction, and exhaust systems. This course examines factors regulating engine

performance failure, and procedures for reclaiming engine performance.

DPM 211 Drivetrain, Steering & Suspension Preventive Maintenance

1.5 Credit Hours • 33.75 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101, DPM 111

Focuses on preventive maintenance of heavy duty truck & equipment drivetrains and steering systems including recording of critical information for the customer. Enables students to grasp the importance of preventive maintenance while gaining an understanding of component operation.

DPM 212 Brake Systems PMI

1.5 Credit Hours • 33.75 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101; DPM 211 or concurrent enrollment

Focuses on preventive maintenance of heavy duty truck & equipment hydraulic and pneumatic brake systems, including recording of critical information for the customer. Enables students to grasp the importance of preventive maintenance while gaining an understanding of component operation.

DPM 222 Heavy Duty Lighting & Instrumentation

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101, DPM 120

Covers the diagnosis and repair of lighting systems found on medium and heavy duty trucks and equipment including inspection and testing of electrical circuits and interfacing through databus with onboard computers. This course meets the Medium/Heavy Truck Service Technology/Medium/Heavy Truck Master Service Technology (TST/MTST) program accreditation standards.

DPM 223 Heavy Duty Body Electrical Systems

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101, DPM 120

Provides a comprehensive study of the theory, operation, diagnosis, and repair of the heavy duty vehicle body and safety electrical systems and accessories.

DPM 240 Heavy Duty Steering & Suspension II

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101; DPM 140 or concurrent enrollment

Covers the diagnosis and service of heavy duty standard and air assisted steering along with chassis and frame alignment. This course meets the Medium/Heavy Truck Service Technology/Medium/Heavy Truck Master Service Technology (TST/MTST) program accreditation standards.

DPM 264 Heavy Duty Heating & Ventilation

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101; DPM 265 or concurrent enrollment

Covers the diagnosis, service, and repair of heavy duty equipment heating and ventilation systems. This course meets the Inspection, Maintenance & Minor Repair; Medium/Heavy Truck Service Technology/Medium/Heavy Truck Master Service Technology (IMMR/TST/MTST) program accreditation standards.

DPM 265 Heavy Duty Air Conditioning Systems Service

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 100, DPM 101, DPM 264 or concurrent enrollment

Covers the diagnosis, service and repair of heavy duty vehicle air conditioning systems and their components. This course meets the Medium/Heavy Truck Service Technology/Medium/Heavy

Truck Master Service Technology (TST/MTST) program accreditation standards.

DPM 280 Internship

0-12 Credit Hours • Per Credit Hour, 45 Contact Hours (Internship)

Note: Must have faculty consent to enroll

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

Dietetic Technology Courses

DIT 110 The Modified Diet

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Emphasizes the diet as a therapeutic tool in the treatment of certain diseases and conditions. Covers menu planning, calculation of exchanges, computerized nutritional analysis and development of recipes for tasteful, appealing foods for modified diets.

DIT 121 Nutrition for Dietary Managers

4 Credit Hours • 60 Contact Hours (Lecture)

Focuses on the study of normal nutrition in the individual, nutrition education, nutritional assessment, care plans, principles of therapeutic nutrition, diet modification, and quality assurance for clinical nutrition services. This course is part of the Association of Nutrition and Foodservice Professionals accredited training program for the Certified Dietary Manager, Certified Food Protection Professional (CDM, CFPP).

DIT 123 Management for Dietary Managers

4 Credit Hours • 60 Contact Hours (Lecture)

Focuses on the study of foodservice, sanitation and safety, personnel and communications, and business operations required to manage a foodservice department located in continuous care retirement communities, long-term care facilities, hospitals, schools, and correctional institutions. This course is part of the Association of Nutrition and Foodservice Professionals accredited training program for the Certified Dietary Manager, Certified Food Protection Professional (CDM, CFPP).

DIT 180 Field Experience: Nutrition

1 Credit Hour • 45 Contact Hours (Internship)

Prerequisite: CUA 101, DIT 121, DIT 123, HWE 100

Offers field experience in the study and application of nutrition therapy through modified diets, nutrition screening and nutrition assessments. This course is part of the Association of Nutrition and Foodservice Professionals accredited training program for the Certified Dietary Manager, Certified Food Protection Professional (CDM, CFPP).

DIT 181 Field Experience: Human Resources Management

2 Credit Hours • 90 Contact Hours (Internship)

Prerequisite: CUA 101, DIT 121, DIT 123, HWE 100

Offers field experience in the study and application of personnel management, policies, and evaluation and communication within a foodservice department. This course is part of the Association of Nutrition and Foodservice Professionals accredited training program for the Certified Dietary Manager, Certified Food Protection Professional CDM, CFPP).

DIT 182 Field Experience: Sanitation and Management of Food Systems

2 Credit Hours • 90 Contact Hours (Internship)

Prerequisite: CUA 101, DIT 121, DIT 123, HWE 100

Offers field experience in the study and application of sanitation principles, food protection, Hazard Analysis and Critical Control Point (HACCP) guidelines, and safety inspections of food

preparation equipment and use by employees to meet regulatory guidelines in a foodservice department. This course is part of the Association of Nutrition and Foodservice Professionals accredited training program for the Certified Dietary Manager, Certified Food Protection Professional CDM, CFPP).

DIT 212 Nutrition Care Seminar

3 Credit Hours • 45 Contact Hours (Lecture)

Incorporates hospital clinical experience. Enables the student to make correlation between the case study and application of nutritional interventions in real life patients at the work site. Focuses on special instruction on nutritional assessment to prepare for performing similar tasks in a clinical setting. Increases awareness of textbook verses actual disease states.

DIT 215 Personnel Supervision for Food Service

3 Credit Hours • 45 Contact Hours (Lecture)

Explores methods and reasons for suitable recruiting, selecting, training, and motivating employees in the food service industry.

DIT 221 Food & Drug Interactions

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on prescription and over-the-counter drugs in common use and assesses the side effects. Addresses the nutritional ways of overcoming these side effects.

DIT 250 Food Management Seminar

3 Credit Hours • 45 Contact Hours (Lecture)

Provides an integrated systems treatment of aspects of medical food service addressed previously in individual courses.

DIT 256 Financial Management

3 Credit Hours • 45 Contact Hours (Lecture)

Exposes students to the financial operation and cost management concepts used in successful commercial food service. Emphasizes cost accounting procedures and the use of spreadsheets and other computer-based programs. This course is part of the Pro Mgmt program of the Educational Foundation of the National Restaurant Association.

DIT 270 Clinical Experience: Community

2-4 Credit Hours • Per Credit Hour, 30 Contact Hours (Clinical)

Gives first-hand experience with community nutrition and the changing health care delivery systems. It provides an overview of the agencies and programs involved in community nutrition. It also addresses the significant nutrition problems facing society. The student will have an in-depth experience in one community nutrition agency. The course carries 2-4 semester credits. Students are expected to meet weekly in a seminar class in addition to their on-site work. Students receiving 4 hours credit will work 165 hours at the specified sites plus the 15 hours of seminar. Students receiving 2 hours credit will work 75 hours at their specified site plus the 15 hours of seminar. This course is part of the American Dietetic Association accredited program for the Dietetic Technician. The clinical coordinator and student work out a mutually agreeable schedule to accomplish the required hours.

DIT 271 Clinical Experience: Hospital

6 Credit Hours • 180 Contact Hours (Clinical)

Incorporates first-hand experience with health care clients in a hospital setting. Emphasizes therapeutic dietetics and the application of nutritional care to clinical cases. Provides experience in hospital policy and procedures, nutrition education in a hospital and hospital food service management. Enables the student to have the opportunity to chart and follow an individual patient in a case study. The course carries 2-4 credits. Students are expected to meet weekly in a seminar class in addition to their on-site work. Students receiving 4 hours credit will work 165 hours at the specified sites plus 15 hours of seminar. Students receiving

2 hours credit will work 75 hours at their specified site plus 15 hours of seminar. This course is part of the American Dietetic Association accredited program for the Dietetic Technician. The clinical coordinator and student work out a mutually agreeable schedule to accomplish the required hours.

DIT 272 Clinical Experience: Nursing Homes

4 Credit Hours • 120 Contact Hours (Clinical)

Incorporates first-hand experience with health care clients in retirement/nursing home centers. Emphasizes the administrative side of dietetics with experiences in menu planning, food preparation, purchasing, personnel management, financial control, sanitation and safety. Includes experiences in patient care, education and charting. The course carries 2-4 credits. Students are expected to meet weekly in seminar class in addition to their on-site work. Students receiving 4 hours credit will work 165 hours at the specified sites plus a 15-hour seminar. Students receiving 2 hours credit will work 75 hours at their specified site plus 15-hour seminar. This course is part of the American Dietetic Association accredited program for the Dietetic Technician. The site coordinator and student work out a mutually agreeable schedule to accomplish the required hours.

Driving Courses

DRV 100 Driver's Education

2.5 Credit Hours • 56.25 Contact Hours (Lecture/Lab Combination)

Prerequisite: DRV 130 (Grade of B or higher), DRV 134 (Grade of B or higher)

Consists of 30 hours of classroom instruction and one to six hours of actual driving. Covers defensive driving techniques, drugs and alcohol, consequences of breaking traffic laws, insurance, how to buy a new and used car, proper driving techniques, what to do at the scene of an accident, what to do if your car breaks down, how to maintain your car and prepare for winter driving and seat belt safety. Enables the student to develop skills in defensive driving, three-point turns, parallel parking, right and left turns, right of way, winter driving, highway driving, changing lanes safely, learning to pass other vehicles correctly and rural driving techniques.

DRV 130 Preparing for CDL

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: DRV 132 (Grade of B or higher), DRV 136 (Grade of B or higher)

Prepares students for the CDL written test with detailed study guides in conjunction with the Colorado CDL manual. Students will learn to conduct walk-around inspections and become familiar with the course layout and driving portion of the test.

DRV 132 Trucks & Trailering

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Note: Students must be enrolled in at least one DPM class

Introduces students to the trucking industry, both over-the-road trucks and trailers and the operation of dump trucks used in construction and local commerce. Safe operations will be stressed, including securing loads on van, flat bed and drop bed trailers, watching for overhead hazards, backing safely, following standard fueling procedures, preventive maintenance and tire care.

DRV 134 Trucking Laws & Regulations

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: DRV 132 (Grade of B or higher), DRV 136 (Grade of B or higher)

This class introduces students to the laws and regulations governing the operation of commercial trucks and buses, defensive driving techniques, proper operation of equipment, and safe operation of vehicles while behind the wheel.

DRV 136 Vehicle Inspection & Maintenance

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Note: Students must be enrolled in at least one DPM class

Vehicle inspection and maintenance stresses the importance of pre-trip and post-trip inspections. Students will learn to identify and name the critical components on commercial vehicles, and to recognize problems with lubricants, fluids, tires and wheels, electrical systems, brakes, and the overall condition of the vehicle they intend to drive. This class will also prepare students to pass the pre-trip portion of the CDL driving test.

DRV 138 Driver Training

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: DRV 130 (Grade of B or higher), DRV 134 (Grade of B or higher)

Provides over-the-road driving experience with the driving instructor to prepare participants for the CDL driving test. This class drills students in safe driving procedures both on and off the road, including driving empty and loaded vehicles, proper turning and backing, appropriate use of brakes, shifting, and observing speed limits, signals, road signs, and port-of-entry procedures.

Early Childhood Education Courses

ECE 101 Introduction to Early Childhood Education

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy or concurrent enrollment in CCR 094 and ENG 121

Provides an introduction to the profession of Early Childhood Education (ECE). Course content includes eight key areas of professional knowledge related to working with young children and their families in early care and education settings: child growth and development; health, nutrition and safety; developmentally appropriate practices; guidance; family and community relationships; diversity and inclusion; professionalism; and administration and supervision. This course addresses children ages birth through 8 years.

ECE 102 Introduction to Early Childhood Techniques

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Practicum)

Prerequisite: ECE 103 or concurrent enrollment

Focuses on a classroom seminar and placement in a child care setting. The supervised placement provides the student with the opportunity to observe children, to practice appropriate interactions, and to develop effective guidance and management techniques. Addresses ages birth through age 8.

ECE 103 Guidance Strategies for Young Children

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy or concurrent enrollment in CCR 094 and ENG 121

Explores guidance theories, applications, goals, and techniques, as well as factors that influence behavioral expectations of children. This course includes classroom management and pro-social skills development of young children in early childhood (EC) program settings. This course addresses children ages birth through 8 years.

ECE 111 Infant & Toddler Theory & Practice

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy or concurrent enrollment in CCR 094 and ENG 121

Presents an overview of theories, applications (including observations) and issues pertinent to infant and toddler development in group and/or family settings. Includes state requirements for licensing, health, safety, and nutrition issues.

ECE 112 Introduction to Infant/Toddler Lab Techniques

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Practicum)

Prerequisite: ECE 111 or concurrent enrollment

Includes a classroom seminar and placement in an infant and/or toddler setting. The supervised placement provides the student with the opportunity to observe, to practice appropriate interactions, and to develop effective guidance and nurturing techniques with infants and/or toddlers. Addresses ages prenatal through age 2.

ECE 125 Science/Math & the Young Child

3 Credit Hours • 45 Contact Hours (Lecture)

Examines theories of cognitive development as a framework for conceptualizing the way young children acquire scientific and mathematical skills, concepts, and abilities. Enables students to research and develop appropriate individual and group scientific/mathematical activities for young children.

ECE 127 Music/Movement for the Young Child

1 Credit Hour • 15 Contact Hours (Lecture)

Focuses on the purposes of incorporating music and movement into the early childhood curriculum. Through active participation with hands-on experiences, students work with the concepts of age and developmental appropriateness when designing fun activities with both subjects.

ECE 191 School Age Theory & Practice

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy or concurrent enrollment in CCR 094 and ENG 121

Emphasizes processes for planning and implementing developmentally appropriate environments, materials, and experiences in school age programs, working with children ages 6 – 12 years of age. Provides expression and problem-solving skills in school age children.

ECE 192 School Age Lab Techniques

3 Credit Hours • 90 Contact Hours (Practicum)

Prerequisite: ECE 238

Incorporates lab experience in before/after school, summer camp, or elementary school programs. Focuses on planning and implementing developmentally appropriate curriculum for school age children. Includes assisting the supervising teacher in all activities.

ECE 205 Nutrition, Health & Safety

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy or concurrent enrollment in CCR 094 and ENG 121

Focuses on nutrition, health, and safety as key factors for optimal growth and development of young children. This course includes nutrition knowledge, menu planning, food program participation, health practices, management and safety, appropriate activities, and communication with families for early childhood educators. This course addresses children ages birth through 12 years.

ECE 209 Observation & Assessment of Young Children's Development, Learning & Programs

1 Credit Hour • 15 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy or concurrent enrollment in CCR 094 and ENG 121

Provides a foundational understanding of the observation and assessment of young children's development and learning environments. This course also examines the current research on the continuous practice of observing and assessing children's development and incorporates practice with a variety of assessment instruments, particularly evidence-based and authentic assessment.

ECE 220 Curriculum Development: Methods & Techniques

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy or concurrent enrollment in CCR 094 and ENG 121

Provides an overview of early childhood curriculum development. This course includes processes for planning and implementing developmentally appropriate environments, materials, and experiences that represent best practices in early childhood (EC) program settings. This course addresses children ages birth through 8 years.

ECE 225 Language & Cognition for the Young Child

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: PSY 238**Note: Course offered at CCCOnline only*

Examines theories of cognitive and language development as a framework for conceptualizing the way children acquire thinking skills. Includes observing, planning, facilitating, creative representation, and evaluating strategies within the context of play. Focuses on language, science, math, problem solving, and logical thinking. Addresses ages birth through age 8.

ECE 226 Creativity & the Young Child

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy or concurrent enrollment in CCR 094 and ENG 121

Provides an emphasis on encouraging and supporting creative self-expression and problem-solving skills in children. Explores creative learning theories and research. Focuses on developmentally appropriate curriculum strategies in all developmental domains. Addresses ages birth through age 8.

ECE 237 Theories & Techniques of Social & Emotional Growth

3 Credit Hours • 45 Contact Hours (Lecture)

Note: Must have faculty consent to enroll

Incorporates student specific techniques and strategies for guiding and enhancing social and emotional growth in children 0-8 years. Introduces and compares the theories and theorists underlying quality interactions and patterns of social and emotional progression.

ECE 238 ECE Child Growth & Development

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy or concurrent enrollment in CCR 094 and ENG 121

Covers the growth and development of the child from conception through the elementary school years. This course emphasizes physical, cognitive, language, social, and emotional domains of development as they pertain to the concept of the whole child. It also includes ways adults can provide a supportive early childhood care and educational environment through teamwork and collaboration.

ECE 240 Administration of Early Childhood Care & Education Programs

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy or concurrent enrollment in CCR 094 and ENG 121

Provides foundational knowledge in early childhood program business operations, program development, and evaluation. This course covers administrative skills, ethical decision making, risk and resource management, and components of quality Early Childhood Education (ECE) programs serving children ages birth through 12 years.

ECE 241 Administration: Human Relations for Early Childhood Education

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy or concurrent enrollment in CCR 094 and ENG 121

Focuses on the human relations component of an early childhood professional's responsibilities. This course includes director-staff relationships, staff development, leadership strategies, family-professional partnerships, and community interaction.

ECE 256 Working with Families & Communities

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy or concurrent enrollment in CCR 094 and ENG 121

Examines professional attitudes related to working with diverse families and how unconscious bias may affect family-professional partnerships in early care and education settings. This course covers theoretical perspectives of families and communities, communication strategies, and an exploration of activities and resources to support family engagement in their children's education. Supporting equity and inclusion of all family cultures in early care and education settings for children ages birth through eight.

ECE 260 The Exceptional Child

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy or concurrent enrollment in CCR 094 and ENG 121

Presents an overview of critical elements related to educating young children with disabilities or special needs in the early childhood setting. Topics include typical and atypical development; legal requirements; research-based practices related to inclusion; teaming and collaboration; and accommodations and adaptations. This course examines how a disability or special need may impact a young child's learning process. This course addresses children ages birth through 8 years.

ECE 261 Exceptional Child Lab Techniques

3 Credit Hours • 90 Contact Hours (Practicum)

Prerequisite: ECE 260 or concurrent enrollment

Incorporates a supervised field experience in a program serving exceptional children in an inclusive setting. The course focuses on the responsibility for planning and implementing developmentally appropriate activities, supporting classroom adaptations and accommodations, practicing appropriate interactions, and developing effective guidance and nurturing techniques.

ECE 279 Seminar

1- 6 Credit Hours • Per Credit Hour, 15 Contact Hours (Seminar)

Note: Must have faculty consent to enroll

Provides students with an opportunity to examine aspects of early childhood education in detail.

ECE 289 Capstone: Early Childhood Education

5 Credit Hours • 150 Contact Hours (Practicum)

Note: Must have faculty consent to enroll

Incorporates a demonstrated culmination of learning within a given program of study.

Economics Courses

ECO 101 Economics of Social Issues: SS1

3 Credit Hours • 45 Contact Hours (Lecture)

Examines major contemporary socio-economic issues and policies such as drugs and crime, education, health care, poverty and inequality, and globalization. These issues will be explored using economic tools and methods.

ECO 201 Principles of Macroeconomics: SS1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 100 level or higher and ENG 121

Focuses on the study of the national economy, emphasizing business cycles and long-run growth trends. Explores how macroeconomic performance is measured, including Gross Domestic Product and labor market indicators. Examines the saving-investment relationship and its relationship to Aggregate Supply and Aggregate Demand. Discusses money and banking, international trade, fiscal and monetary policy. Explores the macroeconomic role of the public sector.

ECO 202 Principles of Microeconomics: SS1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 100 level or higher and ENG 121

Focuses on the study of individual decision making, emphasizing households, business firms and industry analysis. Explores market models, including competition, monopoly, monopolistic competition and oligopoly. Examines market failure and related efficiency criteria for government intervention. Explores public policy, including labor market issues, poverty and the environment.

ECO 245 Environmental Economics: SS1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 100 level or higher and ENG 121

Introduces contemporary environmental issues and policies meant to reduce environmental degradation. It introduces the concept of market failure due to pollution. The course covers government pollution reduction policies for air, water, and natural environments. It also covers analytical tools that are used to analyze the effectiveness of these policies.

Education Courses

EDU 188 Practicum I

1-6 Credit Hours • Per Credit Hour, 45 Contact Hours (Practicum)

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the education facility and with the direct guidance of the instructor.

EDU 221 Introduction to Education

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or concurrent enrollment**Note: Must have concurrent field-experience component if not embedded in the class*

Focuses on the historical, social, political, philosophical, cultural, and economic forces that shape the United States public school system. This course includes current issues of education reform, technology as it relates to education, and considerations related to becoming a teacher in the state of Colorado. The course addresses diversity in the preschool through secondary school system.

EDU 222 Effective Teaching

1 Credit Hour • 15 Contact Hours (Lecture)

Focuses on strategies for becoming an effective teacher. Topics include course goals and objectives, the first day, planning a lesson, higher levels of thought, test design and grading, assessment, and teaching and learning styles.

EDU 234 Multicultural Education

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the need to recognize and understand the similarities and differences among people and develop a respect for all individuals and groups. This course provides opportunities to recognize the learning needs of children from different racial, ethnic, cultural, and socioeconomic groups and to encourage

teachers to integrate multicultural and diversity teaching strategies into the school curriculum.

EDU 250 CTE in Colorado

1 Credit Hour • 15 Contact Hours (Lecture)

Explores common elements of American community college philosophy and current practices. It details the philosophy of Career and Technical Education (CTE), the federal Carl D. Perkins legislation and related guidelines for CTE, national and state regulatory agencies, the CCCS program approval process, enrollment management and advising strategies, relevant local and national issues, and quality assurance principles.

EDU 251 Secondary CTE Capstone

3 Credit Hours • 45 Contact Hours (Lecture)

This capstone course in the secondary CTE credentialing sequence offers an in-depth analysis of secondary career and technical student organizations and competitions, the Colorado Technical Act, working with exceptional students, creating and effectively deploying program advisory committees, and an overview of educational and political systems in Colorado. The final project is an analysis of the efficiency with which one's employing school district funds, operates and assesses CTE programs.

EDU 260 Adult Learning & Teaching

3 Credit Hours • 45 Contact Hours (Lecture)

Examines the philosophy of community colleges and the roles and responsibilities of the faculty member within the college community. Introduces basic instructional theories and applications, with particular emphasis on adult learners. Includes syllabus development, learning goals and outcomes, and lesson plans. Emphasizes teaching to a diverse student body, classroom management, assessment and instructional technology.

EDU 261 Teaching, Learning & Technology

3 Credit Hours • 45 Contact Hours (Lecture)

Explores integration of technology instruction into teaching practices used in preschool through postsecondary (P-21) educational settings for all curriculum areas of content. This course reviews a variety of technologies with an emphasis on increasing student learning and retention of knowledge. The course also explores combining technology with several instructional methodologies to promote professional teacher dispositions related to technology-rich teaching.

EDU 263 Teaching & Learning Online

3 Credit Hours • 45 Contact Hours (Lecture)

Provides faculty with the knowledge and skills necessary to design, develop, and deliver courses in a distance format. Focuses on assessment and evaluation methods and methods to incorporate interactive, collaborative and expanded learning activities.

EDU 265 Instructional Design

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: EDU 221 or EDU 260

Introduces the student to a systematic approach to Instructional Design and the design of instruction with multimedia. Incorporates learning and instructional theory into course/training design to ensure the quality of instruction. Covers the process of goal analysis and learning needs coupled with the development of a delivery system to meet those needs. Includes the development of instructional materials and activities and the evaluation of all instruction and learner activities.

EDU 266 Advanced College Teaching Methods

1 Credit Hour • 15 Contact Hours (Lecture)

Explores current adult learning theory and relates this theory to the practice of teaching. It also covers a variety of factors that

influence teaching and learning, including social and individual psychological aspects of adult learning, patterns of participation and motivation, the role of instructional technology, handling challenging classroom behaviors, and assessment and evaluation strategies. The main point raised and discussed throughout the course is that effective teaching requires that instructors utilize a range of teaching and assessment approaches and methods in order to enhance learning.

Electricity Industrial Commercial Courses

EIC 130 National Electrical Code I

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Focuses on the National Electrical Code and local code requirements for electrical installation. Covers chapters one through four of the National Electrical Code.

EIC 135 National Electrical Code II

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: EIC 130

Builds on course EIC 130 and covers chapters five through nine of the National Electrical Code, including hazardous locations, special occupancies, conditions and equipment.

EIC 217 Electrical Estimating/Costing

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Focuses on the fundamentals of electrical estimating, material takeoffs from prints, required labor hours, material loss allowances and scheduling to ensure orderly work progress.

EIC 230 Instrument and Process Control II

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 106, ELT 146, ELT 258

Introduces the basic concepts, principles, equipment and components of instrumentation and control systems found in the process and energy supply industries. The fundamental process variables of pressure, temperature, level, flow and physical properties will be presented. Control loop structure and function will be introduced. The function and operation of a proportional-integral-derivative (PID) controller will be introduced. Students will assemble and operate basic control loops in a laboratory setting.

EIC 245 Supervisory Control & Data Acquisition

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: EIC 259, ELT 106, ELT 146, ELT 258, EIC 230 or concurrent enrollment, ELT 268 or concurrent enrollment

Provides an in-depth overview of how remote sensing and actuation are combined with modern communication techniques to effectively monitor and control industrial processes. Supervisory Control & Data Acquisition (SCADA) refers to an industrial control system, a computer system that monitors and controls processes.

EIC 253 Fiber Optics Certification

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Introduces the theory of fiber optics including standards, installation, connectorization, mechanical/fusion splicing and testing through advanced procedures in troubleshooting, repair and certification. Serves as a non-vendor dependent certification course for levels 1,2 & 3. Focuses on building real world fiber networks with extensive hands on certification and written exams that prepare students for the versatility of actual work environments.

EIC 259 Lan Certification/Repair/Troubleshooting

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ELT 106 or concurrent enrollment, EIC 253 or concurrent enrollment

Explores the testing, repair, certifying and troubleshooting of LAN using network distribution simulators to diagnose twisted repairs, coax and fiber.

Electronics Courses

ELT 101 Survey of Electronics

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
 Introduces electronics for consumers, individuals working in related fields, and those exploring Electronics Engineering Technology as a career option. Covers fundamental concepts, circuit diagrams, construction of circuits, test instruments, basic troubleshooting, and the operation of common electronic systems and circuits.

ELT 106 Fundamentals of DC/AC

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Prerequisite: College Quantitative Literacy
 Introduces the basic skills needed for many careers in electronics and related fields. Covers the operations and applications of basic DC and AC circuits consisting of resistors, capacitors, inductors, transformers, and diodes. Emphasizes the use of common test instruments in troubleshooting.

ELT 107 Fundamentals of Industrial Electronics

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ELT 106
 Provides a basic knowledge of generators, motors, and the solid-state devices and digital techniques used for industrial control applications.

ELT 112 Advanced DC/AC

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ELT 106 or concurrent enrollment
 Continues to build on ELT 106 and covers advanced concepts of DC-AC circuits. Includes an expanded treatment of power supplies, dual-supply rectifier circuits, and Zener diode voltage regulators. Emphasizes troubleshooting.

ELT 134 Solid State Devices I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ELT 112
 Focuses on diode and transistor studies starting with a review of semiconductor materials. Emphasizes rectifier circuits, R-C and L-C filters, limiters and peak detectors, zener regulators, Schottky diodes, varactors/varistors, LED's bipolar transistors, transistor approximation, load-lines, biasing techniques, saturation, operating point, AC models including small-signal operation, h-parameters, and data sheet understanding and interpolation.

ELT 135 Solid State Devices II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ELT 134 or concurrent enrollment
 Continues the study of transistors with an emphasis on application of modern devices to industrial circuits. Includes power amplifiers, Cascaded and Darlington configurations, field-effect devices, JFET's and MOSFET's, depletion and enhancement mode devices, biasing techniques, thyristors, SCR's and variations of the SCR family of devices.

ELT 146 Digital Devices in Computers

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ELT 106 or concurrent enrollment
 Students will learn the basic logic concepts of computer circuits. The concepts of digital circuits used in computer circuitry will be covered. This includes dates, flip-flops, counters and encoders-

decoders. Students will also learn the binary, hex and octal number systems used in computers and how to convert between these number systems and decimal numbers. Troubleshooting of digital circuits will be included.

ELT 147 Digital Devices I

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
 Introduces the operation and application of gates, flip-flops, counters, shift registers, encoders-decoders, and LED displays. Covers binary numbers, Boolean algebra, and troubleshooting.

ELT 148 Digital Devices II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ELT 147 or concurrent enrollment
 Continues ELT 147 with emphasis on the operation and application of programmable logic devices, synchronous counters, multiplexers, liquid crystal displays, ROM and RAM. Includes specifications of ICs, display multiplexing, and design and minimization of circuits. Troubleshooting is emphasized.

ELT 163 Soldering

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
 Covers the theory and practice of high reliability hand soldering in the electronics field. Includes soldering practice with wire and terminal soldering as well as PCB soldering of through-hole and surface-mount devices.

ELT 165 Electronic Assembly

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
 Introduces electronic assembly methods with an emphasis on processes, safety, component recognition, and soldering techniques for both through hole and surface mount components.

ELT 215 Operational Amplifiers

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ELT 135
 Focuses on a study of integrated operational amplifiers and their applications. Troubleshooting is emphasized.

ELT 248 Automation Control Circuits

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ELT 134
 Introduces the fundamentals of automatic controls including process control methodologies used to regulate a system or multiple systems for the purpose of establishing and maintaining a predictable manufacturing process.

ELT 252 Motors & Controls

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 100, ELT 106
 Enables the student to study, construct, test, and evaluate basic industrial control systems, including AC/DC motors, stepper motors, power sources, generators, tachometers, line diagrams and logic functions. Covers safety standards and preventive maintenance.

ELT 255 Fluid Power

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
 Enables the student to study, construct, test and evaluate circuit diagrams, transmission of force and energy, pumps and motors, actuators, cylinders, valves, and control devices. Incorporates the construction of hydraulic and pneumatic circuits using industrial equipment in the laboratory.

ELT 257 Sensors & Transducers

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 100, ELT 106, ELT 146, ELT 267, MAT 107
 Enables the student to study, construct, test and evaluate methods of testing and controlling common industrial processes. Includes sensing systems, transducers, measurement

techniques, systems interfacing, process control, and data acquisition.

ELT 258 Programmable Logic Controllers

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 100, ELT 106, ELT 146 or ELT 148, ELT 252
 Covers the fundamentals of programmable logic controllers (PLCs) as they are applied in robotics and automation. Includes history, terminology, typical applications, hardware, and software. Incorporates lab and project activities that address operating, monitoring, programming, troubleshooting, and repairing PLC controlled lab trainers as well as actual industrial equipment.

ELT 259 Advanced Programmable Logic Controllers

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ELT 258
 Serves as the second in a two course sequence and covers advanced topics and applications for programmable logic controllers (PLCs) as they are applied in robotics and automation. Includes advanced programming, diagnostics, Human Machine Interfaces (HMIs), introduction to automation networking, and system integration. Incorporates lab and project activities that address designing, operating, monitoring, programming, analyzing, troubleshooting, and repairing PLC controlled lab trainers as well as actual industrial equipment.

ELT 261 Microprocessors

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ELT 146 or ELT 147
 Focuses on basic operation and applications of microprocessors. Enables the student to write machine and assembly language programs, interface microprocessors to various devices, and troubleshoot microprocessor-based systems.

ELT 262 Introduction to Microcontrollers

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ELT 106, ELT 146
 Introduces the architecture, hardware, programming languages, and input/output capabilities of microcontrollers. The course develops the skills necessary to write and debug code, program the microcontroller, acquire and analyze sensor data, and use that data to control actuators.

ELT 266 Advanced Electronic Assembly

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ELT 165
 Focuses on the printed circuit board and how to repair, modify and rework broken or defective printed circuit boards. Includes selecting proper procedures, selecting proper tools, making repairs to Lands, replacing components, repairing defects in printed circuit boards, use of conformal coatings, proper handling of electronic components, laminate repair and heat treatment of components.

ELT 267 Introduction to Robotics

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 100, CAD 101, ELT 106, ELT 146
 Introduces basic robotics. Enables the student to program a robot in a higher-level language to perform various tasks. Covers building and interfacing of sensor circuits.

ELT 268 Robotics Technologies

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 100, ELT 106, ELT 267
 Introduces industrial robotics as well as a survey of the technologies and equipment used in manufacturing automation and process control. Includes axis configurations, work envelopes, programming, troubleshooting, and maintenance. Incorporates a survey of automation topics including history, computer and hardwired controls, sensors and transducers, motors and

actuators, fluid power, etc. and provides a preview of the other ELT classes that cover those subjects.

ELT 280 Internship

3 Credit Hours • 135 Contact Hours (Internship)
 Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

Emergency Management & Planning Courses

EMP 101 Principles of Emergency Management

3 Credit Hours • 45 Contact Hours (Lecture)
 Presents a broad overview of an emergency management system and the importance of an integrated approach to managing emergencies. Enables the student to formulate the elements of an integrated teamwork system and devise specific actions for improving their own contributions to local emergency management teams. Focuses on all disciplines that work together in planning for or responding to emergencies.

EMP 105 Emergency Planning

3 Credit Hours • 45 Contact Hours (Lecture)
 Introduces a specialized type of community planning that identifies local government strategies, resources and responsibilities for protecting citizens from the effects of disasters and other major emergency events. Focuses on the Emergency Operations Plan (EOP) and a jurisdiction's game plan for dealing with potential catastrophes resulting from natural hazards and/or human-caused hazards. Examines EOPs in detail including their history and evolution, process, recommended content, style and format, involved stakeholders, and implementation methods. Covers the context of emergency planning as it relates to long-range community planning. Addresses methods for conducting a comprehensive community hazard analysis and highlights lessons learned in recovering from a disaster.

EMP 106 Exercise Design Evaluation

3 Credit Hours • 45 Contact Hours (Lecture)
 Provides knowledge and the development of skills that enable the student to train a staff and to conduct an exercise that tests a community's plan and its operational response capability. Enables the student to manage exercise evaluation activities before, during, and after an emergency management exercise.

EMP 107 Emergency Operations Center & Communications

3 Credit Hours • 45 Contact Hours (Lecture)
 Provides the knowledge and skills to manage and operate an EOC during crisis situations. Covers aspects of properly locating and designing an EOC, how to staff, train and brief EOC personnel, and how to operate an EOC during various situations. Focuses on various aspects of information gathering and dissemination including best practices for use of computers in an EOC environment, promoting enhanced planning and better control information flow to safely and effectively make strategic response decisions.

EMP 240 Leadership & Influence

3 Credit Hours • 45 Contact Hours (Lecture)
 Explores the dynamics of managing major emergency incidents, focusing on the National Incident Command System. Covers major incidents where large life, property, or economic losses are possible. Includes organization and staffing, incident and event planning/staffing, organizing a response to an incident, and incident resource management. Actual incidents are discussed

and analyzed. Focuses on the experience of others in handling major emergencies and the preplanning of emergencies.

Emergency Medical Services Courses

EMS 115 Emergency Medical Responder

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Provides the student with core knowledge and skills to function in the capacity of a first responder arriving at the scene of an emergency, providing supportive care until advanced EMS help arrives.

EMS 121 EMT Fundamentals

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: College Reading & Writing Literacy, College Quantitative Literacy

Note: EMS 121, EMS 122, EMS 123, EMS 124 and EMS 170 must be taken concurrently

Introduces the Emergency Medical Technician (EMT) student to pre-hospital emergency care. The topics included in this course are Emergency Medical Services (EMS) systems, well-being of the EMT, communications, documentation, anatomy, airway management, and patient assessment.

EMS 122 EMT Medical Emergencies

4 Credit Hours • 67.5 Contact Hours (45 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: College Reading & Writing Literacy, College Quantitative Literacy

Note: EMS 121, EMS 122, EMS 123, EMS 124 and EMS 170 must be taken concurrently

Provides the Emergency Medical Technician (EMT) student with the knowledge and skills to effectively provide emergency care and transportation to a patient experiencing a medical emergency. This course focuses on the integration of the physical exam, medical history, and pathophysiology when assessing and treating the medical patient.

EMS 123 EMT Trauma Emergencies

2 Credit Hours • 33.75 Contact Hours (22.5 Lecture, 11.25 Lecture/Lab Combination)

Prerequisite: College Reading & Writing Literacy, College Quantitative Literacy

Note: EMS 121, EMS 122, EMS 123, EMS 124 and EMS 170 must be taken concurrently

Provides the Emergency Medical Technician (EMT) student with the knowledge and skills to provide appropriate emergency care and transportation of a patient who has suffered a traumatic injury. The concepts of kinematics and the biomechanics of trauma, along with pathophysiology and injury patterns will provide the student with the ability to assess and manage the trauma patient.

EMS 124 EMT Special Considerations

2 Credit Hours • 33.75 Contact Hours (22.5 Lecture, 11.25 Lecture/Lab Combination)

Prerequisite: College Reading & Writing Literacy, College Quantitative Literacy

Note: EMS 121, EMS 122, EMS 123, EMS 124 and EMS 170 must be taken concurrently

Provides the Emergency Medical Technician (EMT) student with the knowledge and skills required to modify the assessment, treatment, and transportation of special patient populations and patients in special circumstances. This course also provides an overview of incident command, mass casualty incidents, vehicle extrication, air medical support, hazardous materials, and terrorism.

EMS 126 EMT Basic Refresher

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Provides the student with a refresher course designed to meet the recertification requirements for the State of Colorado and/or a portion of the recertification requirements for National Registry.

EMS 127 Advanced Emergency Medical Technician Special Considerations

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: EMS 129 or concurrent enrollment, EMS 131 or concurrent enrollment, EMS 133 or concurrent enrollment, EMS 135 or concurrent enrollment. Current Colorado EMT certification and IV endorsement.

Introduces the Advanced Emergency Medical Technician (AEMT) student to the fundamental knowledge of growth, development and aging considerations in the emergency patient. The student will learn to use assessment findings to provide basic and selected advanced emergency care and transportation for a patient with special needs. These include the obstetric patient, neonatal patient, pediatric patient, geriatric patient, and patients with special challenges. Learners will apply this knowledge to patient assessment and the development of a treatment plan in a simulated setting. This course also provides an overview of the principles of safe ground ambulance operations, incident management, multiple casualty incidents, air medical responses, vehicle extrication, hazardous material awareness and terrorism and disaster response. Learners will apply critical thinking skills to ensuring the safety of a scene and a plan for safe patient care and transportation.

EMS 129 Emergency Medical Technician Pharmacology

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: EMS 127 or concurrent enrollment, EMS 131 or concurrent enrollment, EMS 133 or concurrent enrollment, EMS 135 or concurrent enrollment. Current Colorado EMT certification and IV endorsement.

Provides the Advanced Emergency Medical Technician (AEMT) student with a basis for making clinical decisions in the pharmacologic management of patients commonly encountered in the pre-hospital setting. Topics include the legal and ethical aspects of pharmacotherapy, roles, responsibilities and techniques associated with medication preparation and administration, the classification and naming of medications, pharmacokinetics, pharmacodynamics and medication calculations. In addition, the mechanism of action, dose, route(s) of administration, therapeutic effects, adverse effects, and therapeutic indications for medications within the Advanced Emergency Medical Technician scope of practice are discussed in detail.

EMS 131 Advanced Emergency Medical Technician Fundamentals

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: EMS 127 or concurrent enrollment, EMS 129 or concurrent enrollment, EMS 133 or concurrent enrollment, EMS 135 or concurrent enrollment. Current Colorado EMT certification and IV endorsement.

Provides the Advanced Emergency Medical Technician (AEMT) student with instruction in EMS systems, communications and documentation, pathophysiology, airway management, and the role of EMS in public health.

EMS 132 EMS Intravenous / Intraosseous Therapy

2 Credit Hours • 48.75 Contact Hours (33.75 Lecture/Lab Combination (1.5 Credit Hours), 15 Clinical (0.5 Credit Hours))

Note: Student must hold a current Colorado EMT certification

Focuses on cognitive and skill practice for the Colorado scope of practice for the IV / IO endorsement as outlined in the Intravenous / Intraosseous Therapy and Medication Administration course curriculum.

EMS 133 Advanced Emergencies Medical Emergencies

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: EMS 127 or concurrent enrollment, EMS 129 or concurrent enrollment, EMS 131 or concurrent enrollment, EMS 135 or concurrent enrollment. Current Colorado EMT certification and IV endorsement.

Introduces the Advanced Emergency Medical Technician (AEMT) student to a fundamental knowledge of emergency care for the medical patient. This course provides instruction in the integration of physical exam findings, history findings, and pathophysiology when assessing and treating the medical patient. Topics addressed include neurology, immunology, infectious diseases, endocrine disorders, cardiovascular disorders, toxicology, respiratory emergencies, hematology, and renal disorders.

EMS 135 Advanced Emergency Medical Technician Trauma Emergencies

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: EMS 127 or concurrent enrollment, EMS 129 or concurrent enrollment, EMS 131 or concurrent enrollment, EMS 133 or concurrent enrollment. Current Colorado EMT certification and IV endorsement.

Introduces the Advanced Emergency Medical Technician (AEMT) student to a fundamental knowledge of emergency care for the trauma patient. The student will learn how to utilize assessment findings to provide basic and selected advanced emergency care and transportation for the trauma patient.

EMS 138 Basic EMS Simulation Lab

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: EMS 121, EMS 122, EMS 123, EMS 124, EMS 170

Note: Must have faculty consent to enroll

Integrates the knowledge and skills learned during Emergency Medical Technician (EMT) training. The participants will be exposed to the environment they will function in upon completion of their Emergency Medical Service (EMS) education. Participants will be expected to manage all aspects of an EMS call at the basic life support level from the time of dispatch to patient transfer. This will include radio, verbal and written communications; legal and ethical issues; response activities; scene assessment and management; patient interaction, assessment, and treatment; patient disposition; and preparation for the next call. Simulations are realistic representations of calls an EMT may encounter and are conducted in "real time." There is no verbalization of any aspect of the call. Unless a safety issue exists, there is no instructor interaction with the learner until the call is complete and the debriefing session occurs. The knowledge base for this course is based on current EMT certification.

EMS 140 Advanced Simulation Lab

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: EMS 138

Note: Must have faculty consent to enroll

Builds upon the knowledge gained in the basic simulation lab. The participants will be exposed to the environment they will function in upon completion of their Emergency Medical Service (EMS) education. Participants will be expected to manage all aspects of an EMS call at the advanced life support level from the time of

dispatch to patient transfer. This will include radio, verbal and written communications; legal and ethical issues; response activities; scene assessment and management; patient interaction, assessment, and treatment; patient disposition, and preparation for the next call. Simulations are realistic representations of calls an advanced life support clinician may encounter and are conducted in "real time." There is no verbalization of any aspect of the call. Unless a safety issue exists, there is no instructor interaction with the learner until the call is complete and the debriefing session occurs. The knowledge base for this course is based on current EMT certification, information gained during the basic simulation lab, and knowledge and skills acquired from advanced life support classes.

EMS 162 Wilderness EMS- Upgrade

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: EMT certification

Provides an enhanced understanding of assessment and treatment skills in a remote challenging environment to currently certified EMS professionals of all levels. This course is designed to align with a variety of Wilderness EMS upgrade programs that focus on wilderness concepts and skills. Students will receive Certification of Completion upon successful completion.

EMS 170 EMT Clinical

1 Credit Hour • 30 Contact Hours (Clinical)

Prerequisite: Concurrent enrollment in EMS 121, EMS 122, EMS 123, EMS 124

Note: Student must hold a current CPR card at the American Heart Association Healthcare Provider or American Red Cross Professional Rescuer level prior to starting clinical rotations midway through the semester. Students can obtain this card by completing HPR 102 at PPCC or by taking the course in the community.

Grading: P/F only

Provides the EMT student with the clinical experience required for initial certification and some renewal processes.

EMS 171 Advanced Emergency Medical Technician Clinical Internship

2 Credit Hours • 90 Contact Hours (Clinical)

Prerequisite: EMS 127 or concurrent enrollment, EMS 129 or concurrent enrollment, EMS 131 or concurrent enrollment, EMS 133 or concurrent enrollment, EMS 135 or concurrent enrollment. Current Colorado EMT certification and IV endorsement.

Builds on the Advanced Emergency Medical Technician (AEMT) student's fundamental knowledge of patient care in the clinical and field setting. The student will perform patient assessments through physical examination, and patient interviews of health history and current illness. The student will then use those assessment findings to develop and carry out a patient treatment plan. This will include pediatric, geriatric and adult patients with a variety of presentations. The student will also survey each field scene for safety considerations and scene management.

EMS 181 EMT Internship

1.5 Credit Hours • 67.5 Contact Hours (Internship)

Prerequisite: Colorado EMT Certification

Provides the learner with the opportunity to apply clinical concepts, strategies, and skills in a supervised field internship setting as a pre-hospital healthcare provider. Under the supervision of a preceptor, participants will be expected to manage all aspects of an emergency call from the time of dispatch to patient transfer. This will include radio, verbal and written communications, legal and ethical issues, response activities, scene assessment and management, patient interaction, assessment, and treatment, patient disposition, and preparation

for the next call. The course allows the learner to gain knowledge, skills, and experience that may be required for employment, or required as a prerequisite for further Emergency Medical Services (EMS) education. The knowledge base for this course is based on current pre-hospital healthcare provider certification, and knowledge and skills acquired from EMS classes the participant has completed or is currently enrolled in.

EMS 225 Fundamentals of Paramedic Practice

3 Credit Hours • 90 Contact Hours (45 Lecture/Lab Combination, 45 Practicum)

Prerequisite: BIO 201

Note: Must have faculty consent to enroll

Introduces the paramedic student to the advanced practice of prehospital care. This course covers professional behavior, medical ethics, legal issues, patient assessment, therapeutic communication, clinical decision making, and basic and advanced airway management. This course discusses EMS's role in the healthcare continuum, professional communication, patient care documentation, IV fluid therapy and resuscitation, and the application of evidence based medicine. A brief overview of human anatomy, physiology and pathophysiology is included.

EMS 226 Fundamentals of Paramedic Practice Lab

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Serves as the lab experience to coincide with EMS 225 topics.

EMS 227 Paramedic Special Considerations

3 Credit Hours • 90 Contact Hours (45 Lecture/Lab Combination, 45 Practicum)

Note: Must have faculty consent to enroll

Focuses on a comprehensive study of Advanced Life Support Practice.

EMS 228 Paramedic Special Considerations Lab

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Serves as the lab experience for those students enrolled in EMS 227.

EMS 229 Paramedic Pharmacology

3 Credit Hours • 90 Contact Hours (45 Lecture/Lab Combination, 45 Practicum)

Note: Must have faculty consent to enroll

Introduces the paramedic student to advanced emergency pharmacology, pharmacokinetics and pharmacodynamics. This course will include laws affecting the use and distribution of medications, medication dosing, clinical calculations, routes of administration and discussion of common medication classifications to include indications, contraindications and side effects.

EMS 230 Paramedic Pharmacology Lab

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Serves as the required lab course in the paramedic education program.

EMS 231 Paramedic Cardiology

5 Credit Hours • 135 Contact Hours (90 Lecture/Lab Combination, 45 Practicum)

Note: Must have faculty consent to enroll

Introduces the paramedic student to cardiovascular emergencies and the care of patients presenting with cardiovascular emergencies. Topics will include assessment of the cardiovascular system, ECG acquisition and interpretation both single lead and 12 lead, pathophysiology of cardiovascular disease and treatments indicated for a given disease.

EMS 232 Paramedic Cardiology Lab

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Incorporates a hands-on application of principles of cardiac care in the hospital environment.

EMS 233 Paramedic Medical Emergencies

4 Credit Hours • 112.5 Contact Hours (67.5 Lecture/Lab Combination, 45 Practicum)

Note: Must have faculty consent to enroll

Expands on the paramedic student's knowledge of medical emergencies with the Integration of assessment findings in formulating a field impression and implementing a treatment plan. This course will cover principles of epidemiology and pathophysiology related to common medical emergencies including: neurological, abdominal and gastrointestinal disorders, immunological, infectious diseases, endocrine disorders, psychiatric disorders, toxicological, respiratory, hematological, genitourinary, gynecological, non-traumatic musculoskeletal disorders, and diseases of the eyes, ears, nose, and throat.

EMS 234 Paramedic Medical Emergencies Lab

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Focuses on a clinical study of adult and pediatric medical emergencies.

EMS 235 Paramedic Trauma Emergencies

4 Credit Hours • 112.5 Contact Hours (67.5 Lecture/Lab Combination, 45 Practicum)

Note: Must have faculty consent to enroll

Expands on the paramedic student's knowledge of trauma emergencies with the integration of assessment findings in formulating a field impression and implementing a treatment plan for an acutely injured patient. The course will provide an in-depth evaluation of trauma to include: categorization of trauma patients, incidence of trauma, trauma systems, types of injury, trauma assessment, documentation in trauma, trauma scoring scales, trauma center designations, and transfer of patients.

EMS 236 Paramedic Trauma Emergencies Lab

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Serves as a lab presenting various acute trauma scenarios.

EMS 237 Paramedic Internship Preparatory

2 Credit Hours • 30 Contact Hours (Lecture)

Note: Must have faculty consent to enroll

Reviews concepts and techniques used in the pre-hospital setting.

EMS 280 Paramedic Internship I

6 Credit Hours • 270 Contact Hours (Internship)

Note: Must have faculty consent to enroll

Serves as the preceptor/internship program for paramedic students.

EMS 281 Paramedic Internship II

6 Credit Hours • 270 Contact Hours (Internship)

Note: Must have faculty consent to enroll

Serves as the continuation of EMS 280, preceptor program for paramedic students.

EMS 310 Clinical Assessment in the Behavior Setting

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: Admission into the Advanced Paramedic Practitioner BAS

Introduces several assessment tools and techniques to utilize when assessing a client in a behavioral setting.

EMS 311 Motivational Interviewing and De-escalation Techniques

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: Admission into the Advanced Paramedic Practitioner BAS

Introduces the Motivational Interviewing (MI) concept as a client-centered and conversational method of communication designed to assist helping professionals address clients' ambivalence to change. The course will also introduce de-escalation techniques aimed at calmly communicating with an agitated client in order to understand, manage, and resolve their concerns.

EMS 312 Trauma Informed Care and Assessment

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: Admission into the Advanced Paramedic Practitioner BAS

Provides an overview of trauma-informed approaches, covering the types of trauma experienced, the impact of trauma on individuals, and principles of trauma-informed care.

EMS 330 Community Advocacy and Outreach

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: Admission into the Advanced Paramedic Practitioner BAS

Introduces the role and function of the Community Paramedic (CP). The course provides insight into Community Paramedic's specific role and function as a member of a health care team and part of a community. The course identifies the components of the role, defines the role, and explains "scope of service" for the position of CP. The role of the CP as an advocate for clients in the community is discussed.

EMS 331 Community Assessment

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: Admission into the Advanced Paramedic Practitioner BAS

Introduces students to the role of the Community Paramedic (CP) as a member of the health care team in community assessment. The course presents concepts related to mapping community health care services, describing the demographics of the community, and assessing their impact on the health of the potential patients. The course will provide an understanding of community health services in order to understand the health care needs in the community.

EMS 425 Fundamentals of Advanced Paramedic Practice

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: Admission into the Advanced Paramedic Practitioner BAS

Presents advanced techniques for patient assessment and management. The course covers analysis of lab values associated with electrolytes, pharmacokinetics, and pulmonary gasses as they pertain to the pathophysiology of disease and patient management.

EMS 430 Care and Prevention Development Strategies

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: Admission into the Advanced Paramedic Practitioner BAS

Introduces the responsibilities of the Community Paramedic (CP) for gathering appropriate patient/client information and maintaining accurate records, including documentation of encounters between the CP and the patient/client. The course presents information about the CP's role in assessing health care needs and appraising health care conditions.

EMS 433 Advanced Paramedic Medical Care

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: Admission into the Advanced Paramedic Practitioner BAS

Provides advanced knowledge on assessing and managing patients with acute medical conditions and chronic medical conditions that have progressed in severity. This course focuses on in-depth pathophysiology of disease, advanced assessment, pharmacologic, and management required for patient care.

EMS 435 Advanced Paramedic Trauma Care

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: Admission into the Advanced Paramedic Practitioner BAS

Provides students with the advanced knowledge required to assess and manage patients with acute medical conditions and chronic medical conditions that have progressed in severity. In-depth pathophysiology of disease will be presented in conjunction with the advanced assessment, pharmacologic and management knowledge required to care for patients.

EMS 489 Capstone

5 Credit Hours • 150 Contact Hours (Clinical)

Prerequisite: Admission into the Advanced Paramedic Practitioner BAS

Provides students opportunity in a clinical setting for gathering and reviewing patient history, developing a care plan, providing appropriate treatment or counseling to the patient and determining appropriate patient disposition. This course will also require a capstone project.

Emergency Service Administration Courses**ESA 300 Leadership for Emergency Executives**

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: Permission of Program Faculty

Focuses on the necessary skills to lead in complex systems. This course covers emergency leadership core competencies including critical thinking, problem solving, visionary strategic planning, organizational communication, negotiation, and conflict resolution skills. Additionally, it introduces ethical obligations in the emergency leadership profession.

ESA 305 Crisis Communication & Public Relations

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ESA 300 or concurrent enrollment

Designed to enhance the communication and interpersonal skills of emergency administrators and responders. This course discusses different components of crisis communication before, during and after an emergency event and examines the cognitive and affective aspects of communication. Additionally, it covers effective communication with a wide range of audiences and strategies to avoid conflicts.

ESA 310 Emergency Public Information & Media Training

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ESA 300, ESA 305

Provides training on communicating emergency public information. This course covers communication technologies, relationships among methods of delivery, effective skills of an effective PIO, and effective communication tools for given situations and audiences. Additionally, it provides training on effective oral and written communication, designing and executing a media plan, and developing a public awareness campaign for an emergency event.

ESA 315 Elements of Emergency Service Administration

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ESA 300

Examines roles and responsibilities of the emergency service administrator in terms of leading, multiagency coordinating, communicating, documenting, training, establishing procedures, budgeting, and financing. This course introduces innovative techniques in administration in the fields of fire, EMS, law enforcement and military. Additionally, it covers lean management tools to improve quality, cost and delivery in the field of emergency services.

ESA 320 Designing Safer Communities: Pre-incident Planning & Risk Analysis

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ESA 300

Introduces practices employed in risk management including identification of and differentiation between hazards and threats. This course focuses on vulnerability and risk assessment/analysis methodologies and discusses the importance of the country's critical infrastructure and key resources, its vulnerability to attack, and the need for effective public-private partnerships at the local, state and federal government levels to build safer communities.

ESA 325 Public Policy & Practical Applications in Emergency Services

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ESA 300

Covers legal systems, laws, regulations and policy process within the context of disaster policy and demonstrates how political factors play a role in all phases of emergency management. This course provides the analytical tools to examine, interpret and analyze governmental decision making before, during and after disasters.

ESA 330 Budget & Planning Fundamentals for Emergency Administrators

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ESA 300

Presents local, state and federal budgeting principles and reporting systems for public sectors in emergency services. This course covers effective and efficient budgeting strategies necessary to support and sustain emergency service organizational operations. Guidelines for procurement of emergency incidents funding is strongly emphasized in this course. Additionally, it describes the auditing systems of local, state and federal governmental organizations and provides scenarios of misappropriations or misuse of governmental funding.

ESA 400 Personnel Management in Emergency Service Agencies

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ESA 300

Focuses on personnel management and human resources as it applies to emergency service agencies in accordance with local, state, and federal laws. Areas of concentration include personnel planning, staffing, supervision, discipline, labor relations, affirmative action, equal employment opportunity, productivity, and compensation. Additionally, it provides training in employee motivation, performance evaluations, contract negotiations, and conducting exit interviews.

ESA 405 Public Health in Complex Emergencies

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ESA 300

Focuses on the psychological and physiological responses to disasters, intervention strategies and mental health care for disaster victims and first responders. This course covers the

functions of health systems and public health laws. It also covers global issues that have the potential to become crises and discusses the future of emergency service response.

ESA 410 Terrorism Threat & Risk Analysis

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ESA 300

Introduces the theoretical and practical aspects of terrorism and counter terrorism. This course examines the evolution, classifications, targets and effects associated with terrorism and discusses the necessary tools to conduct terrorism threat assessments. Additionally, it covers the challenges facing the US governmental agencies responsible for addressing terrorism and providing homeland security. Both local and international terrorism will be addressed including action taken by systems to control, prevent and mitigate terrorism.

ESA 415 Tactical Planning, Response & Recovery

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ESA 300, ESA 315

Focuses on the specialized knowledge and skills necessary for planning and responding to emergencies. This course addresses topics associated with emergency planning including elements of the plan and multi-agency involvement. It discusses the templates and models used to develop action and operation plans. Additionally, it provides training in utilizing the National Incident Management System and the Incident Command System to deploy effective emergency planning and response.

ESA 420 Research & Design for Emergency Administration

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ESA 300, ESA 410

Covers research methodologies and statistical analysis required for composing a research proposal. Databases will be utilized for decision-making, fund requesting and policy development. This course covers barriers to conducting research in the field of emergency services and strategies for eliminating them. Additionally, it provides tips on effective oral and visual presentations as it relates to proposals.

ESA 489 Capstone: Emergency Services Administration

6 Credit Hours • 90 Contact Hours (Lecture)

Prerequisite: Permission of Program Faculty

Provides a demonstrated culmination of learning in emergency service administration knowledge, theory, and skills learned throughout their coursework in an agency setting. Collective knowledge of program topic will be demonstrated through a final project from either an internship (if the student does not have practical agency experience) or a current agency project (if the student currently employed with an agency).

Engineering Courses**EGG 102 Introduction to Engineering Methodologies**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ENG 121 or concurrent enrollment, MAT 121 or concurrent enrollment

Presents a balanced coverage of the fundamental concepts of engineering principles and the practical exposure to a laboratory experience. The principles presented in the lecture setting and the experience gained by performing laboratory projects are intertwined. Students will be expected to engage in a team environment and be actively involved in laboratory as well as standard instructional activities.

EGG 230 Thermodynamics

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 201, PHY 211

Explores fundamental concepts and basic theory, including first and second laws of thermodynamics, properties, states, thermodynamic functions, cycles, mixtures, and chemical and phase equilibrium.

EGG 243 Engineering Economics

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy, College Quantitative Literacy

Introduces methods to analyze cost/benefit elements in technical operations and project proposals, and to compare alternatives, using time value of money concepts. Emphasis is on practical applications and techniques which can be applied to many facets of engineering and commerce, including design, development, production, construction operation, improvements and upgrades. Solutions include the use of graphical and numerical solution methods, interest tables and factors, use of manual calculations and spreadsheet methods.

Engineering Graphics Technology Courses

EGT 103 Applied Dimension & Tolerance

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAD 100, CAD 101, CAD 102 or concurrent enrollment

Focuses on industrial dimensioning practices, enables the student to develop skills in dimensioning techniques and learn to apply the ASME Y14.5 dimensioning standard.

EGT 205 Geometric Dimension & Tolerance

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: CAD 100, EGT 103

Focuses on interpreting and applying geometric dimensioning and tolerancing (GDT) in machining or drafting per the ASME Y14.5 specification. Demonstrate and distinguish GDT through math formulas, tolerancing systems, modifiers, symbols, datums, and tolerances of form, profile, orientation, run-out and location. Students examine and interpret the generation of a working drawing, and how they are developed as a team effort between design, drafting, manufacturing and quality control.

EGT 210 Mechanical Design III

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisites: CAD 255, CAD 259, EGT 103

Provides the training and skillsets to produce industrial working drawings and working models based on ASME standards. Examines industry-based design management models and the process of controlling drawing revisions. Design concepts for linkages, gears, bearings, belt drives, and chain drives will be covered. Examines part function and their relationships to develop detail, assembly, and subassembly drawings including a list of materials.

English Courses

ENG 077 Studio 131

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: AAA 109 or concurrent enrollment**Note: ENG 077 must be taken concurrently with ENG 131*

Integrates and contextualizes reading and writing strategies tailored to co-requisite ENG 131 coursework. Students will read and understand complex materials and respond to ideas and information through technical writing.

ENG 115 Technical English & Communication

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Focuses on the written and oral communication needs of students in vocational and technical fields. Enables the student to practice written, oral, reading, reasoning, and interpersonal communication skills in order to become successful (or to remain successful) in the workplace.

ENG 117 Grammar, Usage & Style for the Professional Writer

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on grammar, usage, and style issues facing the individual who writes on the job, either as a technical writer or a technical professional whose job involves a substantial writing component. Emphasizes knowledge and skills needed for clear, direct, competent communication. Introduces grammatical theory and practice and conventions of usage in English. Covers matters of style, particularly as they relate to clarity for a target audience.

ENG 118 Designing Online Documentation

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on developing technical documents that are delivered to users on-line, such as online manuals and online help information. Emphasizes content, organization, presentation, and style of online documentation. Introduces hypertext and web publishing concepts, as well as project cycle management, working as part of a documentation team, and collaboration with technical experts.

ENG 121 English Composition I: C01

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Emphasizes the planning, writing, and revising of compositions, including the development of critical and logical thinking skills. This course includes a wide variety of compositions that stress analytical, evaluative, and persuasive/argumentative writing.

ENG 122 English Composition II: C02

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 (Grade of C or higher)

Expands and refines the objectives of English Composition I. Emphasizes critical/logical thinking and reading, problem definition, research strategies, and writing analytical, evaluative, and/or argumentative compositions.

ENG 131 Technical Writing I: C01

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Reading & Writing Literacy**Note: Student must be computer literate*

Develops skills one can apply to a variety of technical documents. Focuses on principles for organizing, writing, and revising clear, readable documents for industry, business, and government.

ENG 132 Technical Writing II

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 131 (Grade of C or higher)

Expands and refines the objectives of ENG 131, emphasizing formal presentations, both written and oral.

ENG 201 English Composition III: C03

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 122 (Grade of C or higher)

Provides the skills necessary to enter into higher-level undergraduate academic discourse or professional workplace writing. This course extends rhetorical knowledge and develops critical reading, thinking, and writing strategies in multiple specialized areas of discourse beyond what is encountered in previous composition courses.

ENG 205 Technical Editing

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on editing technical documents of varying lengths and types, from memos to product manuals. Emphasizes consistency, readability, and conformity to an organization's style manual. Introduces conventions governing content, organization, presentation, and style of technical documents. Covers how to develop a style manual. Introduces concepts of project cycle management, working as part of a documentation team, and collaboration with technical experts.

ENG 221 Creative Writing I: AH1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 (Grade of C or higher)

Examines techniques for creative writing by exploring imaginative uses of language through creative genres (fiction, poetry, and other types of creative production such as drama, screenplays, graphic narrative, or creative nonfiction) with emphasis on the student's own unique style, subject matter and needs.

ENG 222 Creative Writing II

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 221

Provides continued development of written expression in the creative genres (fiction, poetry, and other types of creative production such as drama, screenplays, graphic narrative, or creative nonfiction) with emphasis on the student's own unique style, subject matter, and needs. This course is a creative writing workshop centered around producing and critiquing creative work.

ENG 226 Fiction Writing

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 (Grade of C or higher)

Provides techniques for analyzing and writing fiction, including the study of form and technique with an emphasis on the writing process.

ENG 227 Poetry Writing

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 (Grade of C or higher)

Provides strategies for analyzing and writing poetry, including the study of form and craft with an emphasis on the revision process. Sample texts will cover a diverse range of works from various cultures and perspectives.

ENG 230 Creative Nonfiction

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 (Grade of C or higher)

Introduces creative nonfiction and the writing of essays by using creative techniques, such as the personal essay, memoir, and literary journalism. This course provides techniques for analyzing and writing creative nonfiction, including the study of form and technique, and the creative writing process.

ENG 231 Literary Magazine

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 (Grade of C or higher)

Covers the production of a literary magazine through skill building and collaboration. This course introduces the editorial process involved in preparing a literary magazine for publication, including soliciting submissions; selecting material for publication (fiction, nonfiction, poetry, visual art, and other genres, such as drama); preparing a manuscript for publication, including design, layout, and pre-press production; and marketing the final product.

ENG 235 Rhetoric & Propaganda

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 (Grade of C or higher)

Examines classical and modern theories of rhetoric, understood as effective, ethical means of persuasion, and the ways in which

propaganda departs from these means. Enables the student to apply theories of rhetoric and propaganda to examples of presidential rhetoric, Nazi and Soviet propaganda, and other examples of persuasive writing. Includes the study of visual rhetoric with students constructing criteria for identifying visual propaganda, and studying the complex relationship, historically and in the present, between propaganda, democracy, advertising, and mass media.

ENG 280 Internship

3 Credit Hours • 135 Contact Hours (Internship)

Prerequisite: ENG 121 (Grade of C or higher)

Provides structured, guided, and individualized experience that is tailored around the interests and needs of students who may continue in English studies.

English as a Second Language Courses

ESL 011 Basic Pronunciation

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: appropriate placement score

Provides listening and speaking activities that help students recognize and produce English vowel and consonant sounds and common stress and intonation patterns.

ESL 012 Intermediate Pronunciation

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: appropriate placement score

Provides listening, speaking, and reading activities that help students recognize and produce a variety of stress and intonation patterns in English. Helps students to produce problematic English sounds.

ESL 021 Basic Grammar

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: appropriate placement score

Develops competency in basic grammatical structures through oral and written practice.

ESL 022 Intermediate Grammar

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: ESL 021 (Grade of C or higher) or appropriate placement score

Builds on basic grammar structures. This course develops competency in intermediate grammar structures with continued emphasis on oral and written communication.

ESL 023 Advanced Grammar

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: ESL 022 (Grade of C or higher) or appropriate placement score

Builds on intermediate level grammar structures. This course develops competency in advanced grammatical structures with increased emphasis on written communication.

ESL 031 Basic Listening & Speaking

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: appropriate placement score

Provides listening and speaking activities that help the student communicate more competently. Provides practice with pronunciation, vocabulary, and basic grammatical patterns.

ESL 032 Intermediate Listening & Speaking

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ESL 031 (Grade of C or higher) or appropriate placement score

Teaches listening, pronunciation, and conversation skills. Increases speed and accuracy in speaking through free and guided conversational practice.

ESL 041 Basic Reading

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: appropriate placement score

Improves comprehension of simple written texts through vocabulary building and reading strategies.

ESL 042 Intermediate Reading

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ESL 041 (Grade of C or higher) or appropriate placement score

Helps the student read more quickly and accurately and understand a variety of intermediate level reading material.

ESL 043 Advanced Reading

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ESL 042 (Grade of C or higher) or appropriate placement score

Prepares the student for academic reading assignments. Assists the student to read more accurately and critically through the development of vocabulary knowledge and reading skills. Introduces research skills.

ESL 052 Intermediate Composition

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: appropriate placement score

Introduces the fundamentals of paragraph organization and development. Emphasizes development of sentence variety and grammatical competency within well-organized paragraphs.

ESL 053 Advanced Composition

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ESL 052 (Grade of C or higher) or appropriate placement score

Reviews paragraph organization and develops the skill of writing essays using selected rhetorical modes. This course emphasizes accurate use of advanced grammatical structures. Includes summarizing, paraphrasing, and research writing.

ESL 054 ESL Reading & Composition

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: ESL 042 (Grade of C or higher) or concurrent enrollment, ESL 053 (Grade of C or higher), or appropriate placement score

Integrates reading and composition skills. The course reviews paragraph organization and develops the skill of writing essays using selected rhetorical modes. It emphasizes accurate use of advanced grammatical structures. Includes summarizing, paraphrasing, and research writing. In addition, the course focuses on strategies for vocabulary development, improved reading comprehension, and enrichment.

Entrepreneurship Course**ENP 105 Introduction to Entrepreneurship**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores the business skills, personality traits, and commitment necessary to successfully plan, launch, and grow an entrepreneurial venture. This course will cover the challenges and rewards of entrepreneurship. This course will cover the role of entrepreneurial businesses in the United States and the world and their impact on our national and global economy.

Environmental Science Courses**ENV 101 Environmental Science with Lab: SC1**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Quantitative Literacy

Introduces the basic concepts of ecology and the relationship between environmental problems and biological systems. This course includes interdisciplinary discussions on biology, chemistry, geology, energy, natural resources, pollution, and

environmental protection. A holistic approach is used when analyzing how the foundations of natural sciences interconnect with the environment.

ENV 110 Natural Disasters: SC2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Quantitative Literacy

Introduces different types of natural hazards, their causes, effects, and what can be done to reduce the risks to human populations. Scientific advances related to understanding, predicting, and preparing for natural disasters are discussed. This course also covers anthropogenic changes to Earth systems, which may be increasing the frequency and severity of these events.

Ethnic Studies Courses**ETH 200 Introduction to Ethnic Studies: SS3**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces students to the issues of race and ethnicity. Emphasizes ethnic relations in the United States as it pertains to four major groups: Americans of African, Asian, Latino and Native descent. Explores issues of racial and ethnic identity, racism and discrimination, stereotyping, prejudice, segregation, colonialism, integration and acculturation.

ETH 224 Introduction to Chicano Studies

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces students to skills development in multicultural education. Covers Chicano history, migration and labor, education, law and Chicano culture.

Finance Courses**FIN 105 Principles of Banking**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores nearly every aspect of banking as a solid foundation for any career in the financial services industry. Just as the industry is constantly changing, this course is continually being revised to provide specific up-to-date information.

FIN 106 Consumer Economics

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on consumer effectiveness based on consumer choice theory, maximizing income through informed decision making, product utility, and customer satisfaction.

FIN 115 Retail Banking

2 Credit Hours • 30 Contact Hours (Lecture)

Serves as an introductory course intended for newer employees in the saving institutions business and for established employees desiring to learn more about the business in which they work. Covers the origin and growth of saving institutions, their roles in the world of business, their intermediary function, their relationship to the housing industry and markets, the regulatory bodies and government agencies with which institutions work, and the competitive arena in which they operate. Enables the student to acquire a solid foundation for more specialized areas of study.

FIN 201 Principles of Finance

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ACC 101 or ACC 121, MAT 112

Provides factual knowledge of financial institutions and the monetary system used in the United States in relationship to the global economy. Examines tools and techniques such as capital budgeting, time value of money, analysis of financial statements, cost of capital, and risk analysis to analyze business decisions, plan and determine project and firm value, and evaluate sources of financing.

FIN 240 Law and Banking Principles

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: FIN 115 or concurrent enrollment

Serves as a banker's guide to law and legal issues with special emphasis on the Uniform Commercial Code. Examines sources and applications of banking law, contracts, bankruptcy, torts and crimes, real and personal property, and the legal implications of consumer lending.

FIN 287 Cooperative Education

3 Credit Hours • 45 Contact Hours (Co-operative Education)

Note: Must have instructor approval

Provides students an opportunity to gain practical experience in applying their skills and/or develop specific skills in a practical work setting. The instructor works with the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer or work site supervisor.

Fire Science Technology Courses**FST 100 Firefighter I**

9 Credit Hours • 202.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ENG 121 (Grade of C or higher), or ENG 131 or concurrent enrollment

Note: Students must complete the application, meet with the Program Director, and have the Directors permission and signature prior to enrolling in this course. Applicants must have proof of age 18 by the first day of class (no exceptions). Must possess a high school diploma or GED and must be eligible to enroll in ENG 121 or provide proof of completion of ENG 121, or its equivalent, with a grade of C or higher. In order to receive your Colorado State Firefighter I certification, you must have your Colorado State Hazardous Materials Operations certification. We highly recommend that you either take FST 107 Hazardous Materials Operations before or concurrently with FST 100 Firefighter I.

Addresses the requirements necessary to perform at the first level of progression as identified in National Fire Protection Association (NFPA) 1001, Firefighter Professional Qualifications. This is a lecture and lab course for meeting the NFPA 1001, level I, standard.

FST 101 Firefighter II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Addresses the requirements necessary to perform at the second level of progression as identified in National Fire Protection Association (NFPA) 1001, Fire Fighter Professional Qualifications. This is a lecture and lab course for meeting the NFPA 1001, level II, standard.

FST 102 Principles/Emergency Services

3 Credit Hours • 45 Contact Hours (Lecture)

Provides an overview to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government ; laws and regulations affecting the fire service; fire service nomenclature ; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics.

FST 103 Fire Behavior & Combustion

3 Credit Hours • 45 Contact Hours (Lecture)

Explores the theories and fundamentals of how and why fires start, spread and are controlled.

FST 105 Building Construction for Fire Protection

3 Credit Hours • 45 Contact Hours (Lecture)

Provides the components of building construction that relate to fire and life safety. The focus of this course is on firefighter safety. The elements of consideration and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies.

FST 106 Fire Prevention

3 Credit Hours • 45 Contact Hours (Lecture)

Provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education.

FST 107 Hazardous Materials Operations (Level I)

3 Credit Hours • 45 Contact Hours (Lecture)

Note: In order to receive your Colorado State Firefighter I certification, you must have your Colorado State Hazardous Materials Operations certification. We highly recommend that you either take FST 107 Hazardous Materials Operations before or concurrently with FST 100 Firefighter I. Please see an FST advisor for more information.

Introduces hazardous materials incidents, recognizing and identifying hazardous materials, planning response, implementing response procedures, decision making, and continued evaluation at the awareness and operation level.

FST 109 Occupational Safety & Health for Fire

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the basic concepts of occupational health and safety as it relates to emergency service organizations. Topics include risk evaluation and control procedures for fire stations, training sites, emergency vehicles, and emergency situations involving fire, EMS, hazardous materials, and technical rescue. This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavioral change throughout emergency services.

FST 110 Job Placement & Assessment

3 Credit Hours • 52.5 Contact Hours (30 Lecture, 22.5 Lecture/Lab Combination)

Addresses all aspects of the Fire Service entrance examination process and especially emphasizes various components of the exam, including the written, physical abilities, and oral interview. The objective of this class is to help increase the entrance firefighter candidate's chance of obtaining a career in the Fire Service.

FST 126 Vehicle Extrication Awareness Level

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Provides the student with entry level knowledge and skills to safely operate at the scene of a vehicle/machinery extrication. Training in this course represents the minimum level of training needed to respond to a vehicle extrication incident.

FST 160 Candidate Physical Abilities Test Prep

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Grading: P/F only

Prepares students for the CPAT test and other related fitness testing for entry level firefighters. The course will focus on aerobics and strength training to assist students in passing a CPAT test or any related fitness entry level test. Students will also be trained on how to use various firefighting tools as they pertain to how the tools will be used in the CPAT or other related entry level fitness test.

FST 201 Instructional Methodology

3 Credit Hours • 45 Contact Hours (Lecture)

Identifies the roles and responsibilities of the fire service instructor. Includes oral communication skills, concepts of learning, planning and development of lesson plans and instructional materials and delivery methods, testing and evaluations, records and reports, and demonstration of instructional abilities. Fire Instructor I State Certification is possible.

FST 202 Strategy & Tactics

3 Credit Hours • 45 Contact Hours (Lecture)

Provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment, and extinguishing agents on the fire ground.

FST 203 Fire Hydraulics & Water Supply

3 Credit Hours • 45 Contact Hours (Lecture)

Provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems.

FST 205 Fire Investigation I

3 Credit Hours • 45 Contact Hours (Lecture)

Provides the student with the fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing and conducting origin and cause, preservation of evidence and documentation, scene security, motives of the fire setter, and types of fire causes.

FST 206 Fire Company Supervision & Leadership (Fire Officer I)

3 Credit Hours • 45 Contact Hours (Lecture)

Addresses the requisite knowledge and skills required to perform at level 1 as identified in National Fire Protection Association (NFPA) 1021, Fire Officer Professional Qualifications. Areas of focus include fire department organization, company officer traits, roles and responsibilities, communications practices, administrative functions, safety, health and wellness, training, fire prevention, human resources management, and incident management and operations. The course prepares the learner for the Colorado Fire Officer I State Exams and JPR evaluations.

FST 207 Firefighting Strategy & Tactics II

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on tactics and strategies associated with transportation emergencies and fires, high-rise fires, below-ground incidents, confined space emergencies, and special rescue situations.

FST 209 Fire Protection Systems

3 Credit Hours • 45 Contact Hours (Lecture)

Provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers.

FST 251 Legal Aspects of Fire Service

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the Federal, State, and local laws that regulate emergency services, national standards influencing emergency service, standard of care, tort, liability, and a review of relevant court cases.

FST 255 Fire Service Management

3 Credit Hours • 45 Contact Hours (Lecture)

Serves as the basic management course for present and potential members of the fire and emergency service professions. The course introduces the student to current fire service management practices, challenges, and real-world applications from the fire officer's point of view. The course addresses decision making,

problem solving, necessary communication skills, conflict resolution, effective leadership skills, as well as the role of the fire service manager in supervising personnel and programs.

FST 257 Fire Department Administration

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the operations of volunteer and combination fire departments, compliance with standards and ordinances, funding, recruiting, hiring and retaining employees, funding and budgeting, organizational planning, and public relations.

FST 258 Wildland Fire Incident Management & Organization

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces and develops supervisory and decision-making skills for fireline management individuals. Covers (1) First Attack Incident Commander, (2) Crew Supervisor, (3) Incident Commander Multi-resource, and (4) Task Force/Strike Team Leader. All four courses are certifiable by the Incident Command System under NIMS and recognized by the National Wildfire Coordinating Group. Covers fireline safety, size-up, incident planning, ordering, tactics, strategies, and administrative duties.

FST 259 Wildland Firefighting Strategy & Tactics

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on management of uncontrolled fire burning, urban/wildland interface, strategy and tactics used in controlling wild land fires, prevention methods, and incident command practices.

FST 280 Internship

3 Credit Hours • 135 Contact Hours (Lecture)

Prerequisite: FST 100, FST 107, FST 259, current CPAT certification; FST 160 or concurrent enrollment

Note: To be eligible for an FST internship, student will have completed 75% of the AAS coursework with at least a 3.0 GPA.

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

Fire Science Wildland Courses

FSW 100 S-190 Introduction to Wildland Fire Behavior

1 Credit Hour • 15 Contact Hours (Lecture)

Provides instruction in the primary environmental factors that affect the start and spread of wildfire and recognition of potentially hazardous situations. This course can be taught in conjunction with or prior to Firefighting Training S-130.

FSW 101 S-130 Firefighting Training

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Provides entry-level firefighter skills. A version of the L-180, Human Factors on the Fireline, is included as part of the course. Credit should be issued for S-130.

FSW 153 S-290 Intermediate Wildland Fire Behavior

2 Credit Hours • 30 Contact Hours (Lecture)

Designed to prepare the prospective supervisor to undertake safe and effective fire management operations.

French Courses

FRE 101 Conversational French I

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces beginning students to conversational French and focuses on understanding and speaking French. Covers basic vocabulary, grammar, and expressions that are used in daily situations and in travel.

FRE 111 French Language I

5 Credit Hours • 75 Contact Hours (Lecture)

Develops students' interpretive, interpersonal, and presentational communicative abilities in the language. Integrates these skills in the cultural contexts in which the language is used. Offers a foundation in the analysis of culture.

FRE 112 French Language II

5 Credit Hours • 75 Contact Hours (Lecture)

Expands students' interpretive, interpersonal, and presentational communicative abilities in the language across the disciplines. Integrates these skills with the study of the cultures in which the language is used. Offers a foundation in the analysis of culture and develops intercultural communicative strategies.

FRE 211 French Language III: AH4

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: FRE 112 (Grade of C or higher)

Continues the development of increased functional proficiency at the intermediate level in speaking, aural comprehension, reading, writing, and cultural competency in the French language. This course is conducted predominantly in French.

FRE 212 French Language IV: AH4

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: FRE 211 (Grade of C or higher) or concurrent enrollment

Continues the development of increased functional proficiency at intermediate mid-level in speaking, aural comprehension, reading, writing, and cultural competency in the French language.

Geography Courses

GEO 105 World Regional Geography: SS2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines the spatial distribution of environmental and societal phenomena in the world's regions. Environmental phenomena includes topography, climate, and natural resources. Societal phenomena includes patterns of population and settlement, religion, ethnicity, language, and economic development. This course also analyzes the characteristics that define world regions and distinguishes them from each other. This course examines the relationships between physical environments and human societies, and examines globalization, emphasizing the geopolitical and economic relationships between more developed and less developed regions.

GEO 106 Human Geography: SS2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces geographic perspectives and methods in the study of human societies by examining the spatial characteristics of populations, language, religion, ethnicity, politics, and economics. This course examines the relationships between physical environments and human societies.

GEO 111 Physical Geography: Landforms with Lab: SC1

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Reading & Writing Literacy

Examines the principles of Earth's physical processes, emphasizing landforms, soils, and hydrology. Examines the formation and distribution of landforms, such as mountains, valleys, and deserts, and their shaping by fluvial and other processes.

GEO 112 Physical Geography: Weather, Climate and Ecosystems with Lab: SC1

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Reading & Writing Literacy

Introduces the principles of meteorology, climatology, ecology, and regional climate classification. The course investigates the geographic factors which influence climate and ecosystems such as topography, elevation, winds, ocean currents, and latitude.

Geology Courses

GEY 108 Geology of U.S. National Parks: SC2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Quantitative Literacy

Explores significant geologic features and the processes that create them using examples and case studies from the U.S. National Park System. Weathering and erosional landforms, caves and reefs, coasts, glaciers, volcanoes, and complex mountains are discussed. Fundamental geologic concepts including plate tectonics, deep time, and rock classification are introduced and incorporated throughout the course.

GEY 111 Physical Geology with Lab: SC1

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Quantitative Literacy

Introduces the major topics of geology. Course content encompasses Earth's materials, structure, and surface landforms. Geologic time and the geologic processes responsible for Earth's internal and external features are covered. This course includes laboratory experience.

GEY 112 Historical Geology with Lab: SC1

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Quantitative Literacy

Covers the development of Earth through the vast span of geologic time. Emphasis is on the investigation and interpretation of sedimentary rocks and features, the record of ancient environments, fossil life forms, and physical events in Earth's history within the framework of plate tectonics. This course includes laboratory experience.

GEY 135 Environmental Geology with Lab: SC1

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Quantitative Literacy

Introduces the subject of geology as it relates to human activities. Geologic hazards such as floods, landslides, earthquakes, and volcanoes are investigated. Mineral, energy, soil, and water resources are discussed in terms of their geologic formation and identification, usage by society, and associated environmental impacts. Land use issues, waste, and pollution are also examined.

GEY 143 Introduction to Cave Science & Karst Science

2 Credit Hours • 30 Contact Hours (Lecture)

Introduces the science of caves, with emphasis on their geology. Course topics include cave development, the importance of karst geology and hydrology, cave speleothems, and organisms adapted to living in caves.

GEY 205 The Geology of Colorado

3 Credit Hours • 45 Contact Hours (Lecture)

Covers the geologic history of Colorado and notable geologic features present in the state. Emphasis is on the formation of mountain ranges, significant rock types, ore deposits, fossils, and landforms.

GEY 216 General Oceanography w/Lab:SC1

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Provides an introduction to modern geological and physical oceanography, with lesser emphasis on chemical and biological oceanography. Plate tectonics, seafloor geomorphology, marine sediments, coasts, physical and chemical properties of seawater, marine resources, environmental concerns, and water movement in currents, waves, and tides are among the topics covered. This course includes laboratory experience.

German Courses**GER 111 German Language I**

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Develops students' interpretive, interpersonal, and presentational communicative abilities in the language. Integrates these skills in the cultural contexts in which the language is used. Offers a foundation in the analysis of culture.

GER 112 German Language II

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: GER 111 (Grade of C or higher)

Expands students' interpretive, interpersonal, and presentational communicative abilities in the language across the disciplines. Integrates these skills with the study of the cultures in which the language is used. Offers a foundation in the analysis of culture and develops intercultural communicative strategies.

GER 211 German Language III: AH4

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: GER 112 (Grade of C or higher)

Continues the development of increased functional proficiency at the intermediate level in speaking, aural comprehension, reading, writing and cultural competency in the German language. This course is conducted predominantly in German.

GER 212 German Language IV: AH4

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: GER 211 (Grade of C or higher)

Continues the development of increased functional proficiency at intermediate mid-level in speaking, aural comprehension, reading, writing and cultural competency in the German language. This course is conducted predominantly in German.

Health and Wellness Courses**HWE 100 Human Nutrition**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces basic principles of nutrition with emphasis on personal nutrition. This course focuses on macro and micro nutrients and their effects on the functions of the human body. Special emphasis is placed on the application of wellness, disease, and lifespan as it pertains to nutrition.

HWE 103 Community First Aid & CPR

1 Credit Hour • 15 Contact Hours (Lecture)

Grading: P/F only

Prepares the student for certification in CPR and Basic First Aid. Skills will include basic life support, airway obstruction, control of bleeding, shock, and patient care for the unconscious.

HWE 110 Fitness Conditioning & Wellness

2 Credit Hours • 60 Contact Hours (Lab)

Provides the proper techniques and guidelines for a student to develop a personal lifetime program that improves fitness and promotes preventive care and personal wellness. In addition, this course offers instruction in cardiovascular endurance, muscular strength and endurance training, flexibility training, and body composition management to meet individual needs.

HWE 111 Health & Fitness

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Explores the six components of wellness: physical, social, intellectual, spiritual, emotional, and occupational. Topics include health risks, wellness behaviors, and personal behavior change in the areas of nutrition; exercise; substance abuse; stress management; cardiovascular and cancer risk factors; the aging process; and violence, death, and dying in our society. Provides tools to complete self-assessments and develop a wellness program for a healthier lifestyle across a lifespan.

HWE 121 Wilderness First Aid & Outdoor Emergency Care

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Note: Must have First Responder Certification

Provides more advanced wilderness care for the First Responder or EMT provider.

HWE 124 Fitness & Wellness

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

Provides information on fitness and wellness and serves as a guide to design, implement, and evaluate a complete personal fitness and wellness program.

HWE 125 Introduction to Exercise Health Sciences

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the discipline of kinesiology, including the effects of physical activity and exercise on the human physiology and human experience. The course also explores career options including expectations of professionals in the field.

HWE 129 Wilderness First Responder

4 Credit Hours • 67.5 Contact Hours (45 Lecture, 22.5 Lecture/Lab Combination)

Provides the student with those skills and emergency medical care techniques used by guides, trip leaders and others providing primary care in backcountry settings. The student will be able to respond correctly to those medical and trauma situations commonly encountered when entry into the EMS system is delayed or unlikely.

HWE 130 Wilderness First Responder Refresher

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: HWE 129

Meets the standards for recertification of a Wilderness First Responder certification. Topics to be included are CPR, patient assessment, trauma, medical, and environmental emergencies. This course is required to maintain a current Wilderness First Responder certification, which must be re-certified every three years.

HWE 237 Exercise, Nutrition & Body Composition

3 Credit Hour • 52.5 Contact Hours (30 Lecture, 22.5 Lecture/Lab Combination)

Focuses on the concepts of improved performance in all fitness areas. Emphasis is placed on how carbohydrates, fat, and protein impact performance, and the relationship between metabolism and weight for all populations. Addresses unhealthy diets, eating patterns, and behavior modifications to change negative food relationships within a variety of populations.

HWE 248 Exercise Testing Prescription

3 Credit Hour • 52.5 Contact Hours (30 Lecture, 22.5 Lecture/Lab Combination)

Provides the opportunity to conduct and practice fitness assessments. Fitness test results are evaluated and interpreted to develop an individualized exercise prescription that adheres to national standards.

HWE 255 Certified Personal Trainer Preparatory Course

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Provides knowledge and skills to prepare for a nationally recognized personal training certification. The course includes the development and implementation of exercise programs for healthy populations, and for individuals with medical clearance to exercise.

Health Professional Courses

HPR 101 Customer Service in Healthcare

2 Credit Hours • 30 Contact Hours (Lecture)

Instructs students in customer service theory and techniques specifically in the healthcare arena. This course will discuss therapeutic communication, conflict resolution, and negotiation, as well as employee/employer relations. Exploration of diverse populations and cultural sensitivity will be addressed.

HPR 102 CPR for Professionals

0.5 Credit Hours • 7.5 Contact Hours (Lecture)

Grading: P/F only

Meets the requirement for American Red Cross Professional Rescuer CPR or American Heart Association Basic Life Support for those who work in Emergency Services, Health Care, and other professional areas. Material presented in the course is basic patient assessment, basic airway management, rescue breathing, and CPR for infant, children, and adult patients.

HPR 103 CPR for Professionals Renewal

0.25 Credit Hours • 3.75 Contact Hours (Lecture)

Prerequisite: AHA BLS Provider card

Provides students with updates and skill practice to complete renewal requirements for PALS completion card.

HPR 106 Law & Ethics for Health Professions

2 Credit Hours • 30 Contact Hours (Lecture)

Introduces student to the study and application medico-legal concepts in medical careers. This course seeks to establish a foundation for ethical behavior and decision making in health professions.

HPR 111 Success Seminar

1 Credit Hour • 15 Contact Hours (Lecture)

Explores and engages success strategies for students entering the allied health programs. Included are topics related to support team building, learning styles, study skills, note taking, and test-taking specific to the health care professional programs.

HPR 112 Phlebotomy

4 Credit Hours • 135 Contact Hours (45 Lecture/Lab Combination, 90 Practicum)

Prerequisite: College Reading & Writing Literacy

Note: Must be accepted into Phlebotomy program through application process. Program Coordinator approval needed to register. Vicki Bond: vicki.bond@ppcc.edu or 719-502-3324.

Covers the duties associated with the practice of venipuncture, capillary puncture, and special collection procedures. This course provides experience with quality control, infection control, safety procedures, as well as laboratory computer systems. Successful completion of this course, with an adequate number of blood draws, will constitute eligibility for application for a National Phlebotomy Registry Examination.

HPR 113 Advanced Phlebotomy

4 Credit Hours • 135 Contact Hours (45 Lecture/Lab Combination, 90 Practicum)

Prerequisite: HPR 112

Note: Must be accepted into Phlebotomy program through application process. Program Coordinator approval to register. Vicki Bond: vicki.bond@ppcc.edu or 719-502-3324.

Focuses on advanced phlebotomy skills including laboratory protocols, specimen processing and point of care documentation. This course provides opportunities for the student to master learned skills.

HPR 117 Anatomical Kinesiology

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: HPR 139, PTA chair approval

Studies the Anatomical Basis of Human Movement.

HPR 120 Advanced Cardiac Life Support

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Grading: P/F only

Presents the required material for ACLS completion. It will cover arrhythmias, medications, therapeutic modalities for life threatening arrhythmias, airway management, and other treatment modalities used in cardiac and respiratory arrest.

HPR 122 ACLS Instructor Course

0.5 Credit Hours • 0.75 Contact Hours (Lecture/Lab Combination)

Prerequisite: Current Advanced Cardiac Life Support Certification

Note: Instructor candidates must be able to pass the ACLS instructor exam with a 90% or higher and be able to successfully pass the mega-code skills stations with no remediation.

Presents information on how to obtain a complete health history, assessment skills of inspection, palpation, percussion, and auscultation are practiced in class.

HPR 130 Pediatric Advanced Life Support

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Grading: P/F only

Provides students the needed information and skills as required by health care agencies for pediatric emergencies.

HPR 131 Pediatric Advanced Life Support Renewal

0.25 Credit Hours • 3.75 Contact Hours (Lecture)

Prerequisite: AHA BLS Provider card

Provides students with updates and skill practice to complete renewal requirements for PALS completion card.

HPR 132 Pediatric Advanced Life Support Instructor

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: Current Pediatric Advanced Life Support (PALS) certification

Note: The instructor candidate must pass the instructor written exam with a 90% or higher and successfully pass all mega-code stations with no remediation.

Provides the current PALS provider the information and practice needed to instruct PALS initial and renewal courses.

HPR 139 Medical Terminology

2 Credit Hours • 30 Contact Hours (Lecture)

Discusses the structure of medical terms with emphasis on using and combining prefixes, roots, and suffixes. This class includes terms related to major body systems, oncology, and psychiatry, as well as clinical laboratory and diagnostic procedures and imaging, and provides accepted pronunciation and spelling of terms used in the healthcare setting.

HPR 143 Orientation to Health Careers

3 Credit Hours • 45 Contact Hours (Lecture)

Compares various careers, ethics, and work attributes required in the health care field. This course includes an introduction to theory of leadership skills, community awareness, and the student organization HOSA (Health Occupations Students of America).

HPR 179 Seminar

2 Credit Hours • 30 Contact Hours (Lecture)

Provides students with an experiential learning opportunity.

HPR 190 Basic EKG Interpretation

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Provides instruction for interpretation of EKG strips, anatomy and physiology of the heart, using three-lead monitoring as a guide. Twelve-lead EKG may be discussed.

HPR 208 Medical Record Terminology

2 Credit Hours • 30 Contact Hours (Lecture)

Demonstrates knowledge of medical terminology with emphasis on combining complex prefixes, roots and suffixes. Course includes pathophysiology for major body systems. Course includes terms related to diagnostic tools per body systems, as well as commonly used medical abbreviations. Course applies medical terminology knowledge in interpreting the medical record.

Heating, Air Conditioning and Refrigeration Technology Courses

HVA 102 Basic Refrigeration

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Introduces the basic theory of refrigeration systems, components, charging, recycling, and evacuation of refrigeration units.

HVA 105 Electricity for HVAC/R

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Teaches resistance, current, voltage, and power in AC and DC circuits; measurements; computations of series and parallel circuits; circuit analysis and troubleshooting with basic test equipment.

HVA 110 Fundamentals of Gas Heating

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Introduces students to the fundamentals of gas heating. Students work in a classroom and shop environment. Topics include the basics of gas heating systems, operation of gas valves and burners, gas pipe system design, gas piping system code requirements, and basic code requirements for heating systems.

HVA 111 Piping Skills for HVAC

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Studies the different types of tubing and piping materials used in HVAC/R applications. Studies the proper tubing and piping installation methods used in the HVAC/R field. Subjects covered will be the proper cutting and bending procedures including, pipe math and how to make piping offsets. Common types of piping joints will be discussed, including, swaging, flaring, soldering, and brazing. Also covered will be cutting and threading of steel pipe and other alternative mechanical piping connections. Shop projects will include both bench projects and also mock up installation projects.

HVA 112 R-410a

1 Credit Hour • 15 Contact Hours (Lecture)

Note: End of course certification test fee is a separate fee in addition to normal course fees

Enlightens the student on conditions required for proper operation with R-410a.

HVA 113 Refrigerant Recovery Training

1 Credit Hour • 15 Contact Hours (Lecture)

Note: End of course certification test fee is a separate fee in addition to normal course fees

Explains the laws regarding refrigerant recovery. The course includes hands-on use of recovery equipment. Upon successful completion of this course students will be prepared to take the EPA certification test. Test is offered following the class. Test fee is not included in course fee.

HVA 118 Customer Soft Skills (Customer Services & Ethics)

2 Credit Hours • 30 Contact Hours (Lecture)

Introduces the need for outstanding Customer Service Soft Skills. Teaches the student the proper steps that need to be taken to have good customer service skills that will lead to a lasting relationship with the customer.

HVA 120 Green Technology Awareness

1 Credit Hour • 15 Contact Hours (Lecture)

Introduces the student to basic understanding of Green concepts, terminology, systems and the latest in technology. Also provides information on local rebates through local utilities. An end of course assessment – certification test will be given. Test fee is not included in course fee but is a pass-thru fee.

HVA 132 Air Conditioning & Refrigeration Controls

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Prerequisite: HVA 102 or concurrent enrollment, HVA 105 or concurrent enrollment

Continues HVA 105. The course applies the knowledge of basic electricity to controls related to air conditioning and refrigeration equipment. The course also works on reading and drawing schematic and ladder diagrams.

HVA 141 Sheet Metal Fabrication

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Introduces the basics of shop-based sheet metal tools and hand tools and how they are used to create fittings for residential ducting systems. Safe operation of tools will be stressed. The layout and fabrication of a furnace plenum, a transition, and square and radius elbows will be covered. Other fittings may be covered as time permits.

HVA 142 Residential Air Conditioning

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Prerequisite: HVA 102 or concurrent enrollment, HVA 105 or concurrent enrollment

Details the principles of operation, servicing, and installation of air conditioning systems as they apply to humidifying, cooling, and dehumidifying a residential structure. Basic load calculations will be covered.

HVA 143 Residential HVAC Trouble Shooting

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Prerequisite: HVA 110 or concurrent enrollment

Troubleshooting practical problems and techniques will be covered. Use of computer simulation as well as actual equipment will be utilized.

HVA 146 Residential Load Calculation & Duct Design

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Introduces the importance of equipment sizing by teaching how to properly perform heating and cooling load calculations on residential houses. After determining proper equipment sizing, then demonstrate how to design the ductwork system sizing for proper airflow throughout the house.

HVA 201 Heating for Commercial

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Note: Sophomore standing or faculty consent

Covers hydronic and steam heating systems, including steam, hot water, and forced air-heating systems for commercial buildings.

HVA 204 Direct Digital Controls

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Note: Sophomore standing or faculty consent

Introduces the student to the field of direct digital controls.

HVA 206 Mechanical Code

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: HVA 110 or concurrent enrollment

Reviews in detail the Uniform Mechanical Code. The course is intended to give those entering the HVAC/R trade, as well as trades people taking certification examinations, a sound knowledge of this code.

HVA 222 HVAC & R Systems Troubleshooting

5 Credit Hours • 82.5 Contact Hours (60 Lecture, 22.5 Lecture/Lab Combination)

Note: Sophomore standing or faculty consent

Studies troubleshooting industrial and commercial heating, ventilating, air conditioning, and refrigeration systems.

HVA 233 Advanced Refrigeration

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Note: Sophomore standing or faculty consent

Builds on the skills acquired in refrigeration fundamentals. The student will have an opportunity to study and to work on rooftop units, ice machines, and commercial reach-in and walk-in coolers.

HVA 241 Advanced Air Conditioning

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Note: Sophomore standing or faculty consent

Studies commercial air conditioning systems to include centrifugal water chillers, air handlers, and building systems.

HVA 245 Commercial Refrigeration & Air Conditioning

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

Builds on the skills acquired in refrigeration and air conditioning fundamentals. The student will study commercial air conditioning systems to include rooftop units, water chillers, cooling towers, air handlers and facilities equipment. The student will have an opportunity to study and work on commercial reach-in and walk-in coolers, ice machines, and study the workings of commercial supermarket systems. The student will study and demonstrate how to troubleshoot commercial heating, air conditioning and refrigeration systems.

HVA 247 Hot Water Heating Systems

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: HVA 110 or concurrent enrollment

Covers the theory of operation behind these systems, as well as installation, maintenance and repair. The course also examines air elimination, circulator pump and pipe sizing. Boiler and heat convector sizing are also discussed.

HVA 251 Building Automation I, Installer

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Prerequisite: ELT 101 or concurrent enrollment

Helps the student with the installation of building automation devices with regard to HVAC equipment.

HVA 252 Building Automation II, Service

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Prerequisite: HVA 251

Covers operating and modifying an installed building automation system. This is a highly interactive course where you will learn and exercise common applications of a building management system.

HVA 253 Building Automation III, Advanced Operations

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Prerequisite: HVA 252

Covers complete set up and programming of a building automation system. The class includes extensive hands-on workshops.

HVA 259 Commercial HVAC System Design

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: HVA 105

Introduces the basics of designing HVAC systems as it relates to commercial buildings. Studying the areas of basic scientific principles relating to HVAC system designs, indoor air quality and comfort, heating and cooling load calculations and HVAC duct system design. Provides a foundation of knowledge related to commercial HVAC systems including what the HVAC designer thinks as they make system, zoning, equipment, and automatic control choices.

HVA 262 Residential Heat Pump Service

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Note: Sophomore standing or faculty consent

Introduces the student to the fundamentals of heat pump systems. Reverse-cycle refrigeration, four-way valves, air source heat pumps, ground source heat pumps, water source heat pumps, refrigerant line identification, types of metering devices, and liquid-line accessories will be covered. Installation and troubleshooting will also be covered.

HVA 280 Internship

2 Credit Hours • 90 Contact Hours (Internship)

Gives the student an opportunity to apply their course studies in a specific area.

HVA 289 Capstone

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Demonstrate culmination of learning within a given program of study.

History Courses

History courses may be taken in any order

HIS 101 Western Civilization: Antiquity–1650: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Explores trends within events, peoples, groups, ideas, and institutions in Western Civilization from antiquity to 1650. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 102 Western Civilization: 1650–Present: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Explores trends within events, peoples, groups, ideas, and institutions in Western civilization since 1650. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 111 The World: Antiquity–1500: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Explores trends within events, peoples, groups, ideas, and institutions in World History from antiquity to 1500. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity. This course focuses on common cultural trends.

HIS 112 The World: 1500–Present: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Explores trends within events, peoples, groups, ideas, and institutions in World History since 1500 as well as on common cultural trends. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through the perspectives such as gender, class, religion, and ethnicity.

HIS 121 U.S. History to Reconstruction: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Explores trends within events, peoples—including Native American—groups, ideas, and institutions in North America and the United States to Reconstruction. This class focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 122 U.S. History Since the Civil War: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Explores trends within events, peoples, groups, ideas, and institutions since the American Civil War. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 203 Civil War Era in American History: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Explores the causes, course, and consequences of the American Civil War. Students will examine four broad themes: union and disunion; slavery, race, and emancipation; the experience of modern war for individuals and society; and the challenges of Reconstruction. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 205 Women in World History: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines the roles, experiences, and contributions of women in world history and explores ways in which women's history modifies the traditional interpretations of historical events. This course

focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 207 American Environmental History: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Discovers and analyzes the relationships between Americans and their natural environments throughout the history of the United States. This course examines the development of conservation movements and environmental policies in modern America. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through the perspective of gender, class, religion, and ethnicity.

HIS 208 American Indian History: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Analyzes historical and socio-cultural change for Native Americans from pre-colonial America to the present, emphasizing those processes and relations with non-Native Americans which have contributed to the current conditions. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 215 Women in U.S. History: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines women's changing roles in American history. It explores the nature of women's work and the participation of women in family, political, religious, and cultural activities and in social reform movements. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 218 History of Science & Technology: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Explores the complex relationship between scientific and technological developments and western society and culture. It emphasizes the way social and cultural norms can impact scientific or technological progress, and vice-versa, especially in the period since the Scientific Revolution. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 225 Colorado History: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Presents the story of the people, society, and cultures of Colorado from its earliest Native Americans, through the Spanish influx, the explorers, the fur traders, mountain men, the gold rush, railroad builders, the cattlemen and farmers, the silver boom, the tourists, and the modern state. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 235 History of the American West: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Traces the history of the American West from Native American cultures to the present. It explores the frontier experiences of America's earliest, eastern settlers through the Trans-Mississippi West across the great exploratory and wagon trails including cities, ranching, reservation, resource management, and industry. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 236 U.S. History Since 1945: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines the major political, economic, social, and cultural developments that have shaped modern America from 1945 to the present. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 243 History of Modern China: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Explores the political, ideological, economic, religious, social, and cultural developments of modern China from the Qing dynasty through the political and economic revolutions of the 20th century. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 244 History of Latin America: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Focuses on the major political, economic, social, and cultural influences that have shaped Latin America from pre-European conquest to the present. Emphasizes the early history of Latin America but connects it to the present. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 247 20th Century World History: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Investigates the major political, social, and economic developments, international relationships, scientific breakthroughs, and cultural trends that have shaped the various global regions, empires, and nation-states since the late nineteenth century. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 249 History of Islamic Civilization: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Surveys the tenets of Islam and the political, social, and cultural history of the civilizations that embraced it from the 6th century to the modern day, including the diversity by looking at legal systems, scientific and artistic accomplishments, philosophical heterogeneity and political developments. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of

narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 250 African American History: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Explores the experiences and contributions of African Americans from the colonial period to the present through the social and economic lives and roles of African Americans, their roles in politics and war, their achievements, and movements for self-help and civil rights. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 251 The History of Christianity in the World: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Surveys the history of Christianity and its impact on the world from its Jewish origins, into its European expansion, and ending with its modern global presence. This course analyzes foundational theology, the impact of significant events on faith, the influence of Christianity in art and culture, and the role of key people in their historical contexts. This course inspects Christianity's relationship with Judaism, Islam, Enlightenment, modernity, moral systems, and values.

HIS 255 The Middle Ages: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines political, social, cultural, economic, and intellectual developments in Europe, Byzantium, and the Islamic world from the collapse of Rome through the Renaissance, approximately A.D. 400-1400. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity.

HIS 259 Modern Middle East: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Focuses the political, economic, social, and cultural development of the Middle East from the late Ottoman Empire to the present. It explores the influences of Islam as well as Western ideas and involvement upon institutions of modern Middle Eastern society, and reflects the multiple perspectives of gender, class, and ethnic groups.

HIS 265 Writing About History: C03

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 122

Develops skills in historical writing, the use of rhetorical devices in persuasive historical arguments, critical analysis, and research methods in the historical study. Engaging in diverse historical readings, writings, and conversations, students devise strategies to identify workable topics, locate sources in libraries, archives, and published materials, and adapt their writing style to communicate with a variety of audiences.

Holistic Health Professional Course**HHP 125 Feldenkrais Awareness Through Movement**

0.5 Credit Hours • 15 Contact Hours (Lab)

Incorporates a series of lessons in how the body functions and how to use it more intelligently. Through gentle and exploratory movements, a student learns to retrain the central nervous system and free oneself from habitual patterns of moving, thinking, and feeling that contribute to stress and disease. Through increased bodily awareness, the student examines ways to move more easily

during activities from vigorous sports to breathing, standing and walking.

Hospitality Courses

HOS 131 Planning for Special Events

3 Credit Hours • 45 Contact Hours (Lecture)

Provides a basic knowledge of the planning and development of an event or meeting, including the budgeting, arranging of entertainment and catering, and the lodging of participants.

HOS 148 Introduction to Food & Beverage

3 Credit Hours • 45 Contact Hours (Lecture)

Challenges a food and beverage manager faces in developing a solid customer base is presented in this course. Topics include principles of food production and service management, including menu planning, purchasing, storage, beverage management, and food service layout and equipment. Students will prepare a plan for a food service facility.

HOS 221 Basic Hotel & Restaurant Accounting

3 Credit Hours • 45 Contact Hours (Lecture)

Helps to develop a basic understanding of hotel and restaurant accounting procedures, with a focus on the computerized accounting used in today's hospitality accounting situations. You'll learn about taxation of business income, the role of governmental agencies, and how to read and analyze financial statements.

HOS 226 Supervision in the Hospitality Industry

3 Credit Hours • 45 Contact Hours (Lecture)

Teaches the skills that can help develop effective supervision and management skills that are essential to success in the industry. Topics include how to recruit, select, and train; increase productivity; control labor costs; communicate effectively; manage conflict and change; and use time management techniques. Resources on creating a professional development plan for your hospitality career can help set the direction for future educational and professional endeavors.

HOS 231 Resort Facilities Management & Design

3 Credit Hours • 45 Contact Hours (Lecture)

Covers all major facility systems, including food service equipment and design. Non-engineers can learn how to understand and speak the language of vendors, suppliers, and maintenance/engineering staff. You'll also learn techniques to reduce expenses and increase efficiency, and also learn the latest technology can streamline operations procedures. A discussion of how hotel operations are affected by the United Nations environmental guidelines will provide information on balancing the needs of guests with concern for the environment.

HOS 251 Hotel Operations

3 Credit Hours • 45 Contact Hours (Lecture)

Studies hotel operations covering such aspects as the hotel organization chart, job analysis and design, managing human resources, production and serving controls, calculating food and beverage costs, and telecommunication systems. Case problems provide the students the opportunity to develop control systems for food and lodging organizations and understand the hierarchy of career advancement in a hotel environment.

HOS 280 Internship

3 Credit Hours • 135 Contact Hours (Internship)

Prerequisite: HOS 131, HOS 148, HOS 221, HOS 231, HOS 251, MAR 160

Exposes the learner to the practical application of course studies in the hospitality industry. The course consists of practical experience in a hotel, restaurant, convention center, resort,

tourism operation, or other professional opportunity in the hospitality industry.

Humanities Courses

Humanities courses may be taken in any order

HUM 103 Introduction to Film Art: AH2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces film terminology and narrative techniques to explore how film conveys meaning and to study the relationships among film form, content, and audience reception. This course emphasizes active viewing, discussion, and critical analysis of films from different cultures and eras.

HUM 115 World Mythology: AH2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces an interdisciplinary approach to world mythology. This course illustrates and connects common themes in mythology to world religion, philosophy, art, literature, music, and contemporary culture using various interpretive methods.

HUM 121 Early Civilization: AH2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces the interdisciplinary study of ideas that have defined cultures through a survey of the visual, performing, and literary arts, emphasizing connections among diverse cultures, including European and non-European, from the prehistoric to the early medieval era.

HUM 122 Medieval - Modern: AH2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces the interdisciplinary study of ideas that have defined cultures through a survey of the visual, performing, and literary arts, emphasizing connections among global cultures from the medieval to the early modern era.

HUM 123 Modern World: AH2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces the interdisciplinary study of ideas that have defined cultures through a survey of the visual, performing, and literary arts, emphasizing connections among global cultures from the European Enlightenment to the postmodern era.

HUM 131 The Arts & Cultures of Mexico

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces students, through visual arts, music, and literature to attitudes toward the sacred and toward power (political, economic, social, religious) held by various cultures in Mexico from the Pre-Hispanic era to the mid-twentieth century.

HUM 163 Film Criticism

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Considers different approaches to film criticism, including the journalist, humanist, auteurist, genre, social science, historical, and ideological/theoretical approaches. Students will view and analyze films applying each of the critical approaches through class discussion and other assignments.

HUM 164 American Cinema

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces film studies and surveys the American film industry as an art form, as an industry, and as a system of representation and communication. This course explores how Hollywood films work

technically, aesthetically, and culturally to re-enforce and challenge America's national self-image.

HUM 201 Twentieth Century American Arts

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Focuses on elements common to the arts of film, painting, architecture, literature, and music of 20th century United States. Students study the effects of the economy, business, and industry and traditional North American values and dreams on the arts.

HUM 211 Cultural Diversity in the Humanities

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces students to the various aspects of social and cultural diversity. Promotes development of critical thought and growth of multicultural, multisocial and multilingual understanding.

HUM 236 North American Indian Arts

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Focuses on North American Indian music, dance, architecture, painting, sculpture, pottery, and fashions through a study of the literature of Indian cultures in North America.

HUM 237 Hispanic Arts of the American Southwest

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines the history, visual arts, and permanency of the Hispanic culture of the American Southwest. Through the study of historical sequences, major artistic expressions dating from 1598, and aspects of literature of the contemporary Hispanic society, students will gain an insight into the Hispanic cultural contributions to the Southwest.

HUM 238 Sacred Images, Sacred Spaces: Southwestern U.S.

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines the historical, social, geographical, and cultural forces that influenced the design and presentation of sacred images in several Southwestern U.S. cultures. Students will study stylistic features of images in various media in relation to the sacred spaces where they are displayed or employed in rituals.

HUM 241 Asian Arts & Cultures

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Explores the most popular religions and philosophies of China, Japan, and India and their relationships to the arts and cultures of Asia. Special emphasis will be placed on Hinduism, Buddhism, and Islam.

Interior Design Courses

IND 100 Interior Design Fundamentals

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: College Reading & Writing Literacy, College Quantitative Literacy

An introduction to design elements, principles and theory. Application techniques, emphasizing design relationships and composition, will be explored. Basic skills and techniques of both visual and oral presentations will be introduced.

IND 107 History of Interior Design

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy, College Quantitative Literacy

Offers a study of interiors and furnishings from the medieval period to the Revival styles of the mid-eighteenth century to the contemporary classics used in modern interiors today. Study of interior and exterior architectural elements, furniture, design motifs and ornamentation, fine arts and construction methods as

it relates to the cultural, political, social, technological and economic conditions of the times.

IND 111 Drafting for Interiors

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Introduces the basic drafting tools and techniques, graphic references and symbols, use of pencil and technical pen. Student learns to draft floor plans and interior elevations. Course also covers basic interior dimensioning and lettering as well as isometric drawing construction for interior components.

IND 113 Perspective & Rendering Technique

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Teaches visual communication techniques, methods of communicating interior design plans, ideas and elements using sketching, 2D and 3D drawing and renderings. Emphasis is placed on 2D and 3D perspective drawings, illustrations and renderings.

IND 117 Interior Textiles

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Study and research of fabric types, fibers, weaves, finishes, construction and dyeing & printing methods for residential and commercial fabrics and carpets. Emphasis is on selection of appropriate and code compliant products for environmental, durability and life safety concerns. Evaluation, selection and specification of textile products to create aesthetic and functional designs appropriate for residential and commercial interiors.

IND 118 Interior Finishes

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Introduction to interior finish materials used as a means of functional and aesthetic application by the interior designer. Develop skills to specify appropriate materials, estimate quantities, develop costs and understand installation and removal associated with residential and commercial finishes, with a focus on sustainability.

IND 120 Interior Design II – Space Planning & Human Factors

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: CAD 105

Develop awareness of human dimensions, spatial organization and the importance of physical and psychological characteristics of people. Ergonomics, building codes, ADA factors and universal design will be studied along with programming methods of gathering and organizing data for solving design problems and creating appropriate spatial relationships & furniture layouts for residential and commercial projects.

IND 151 Residential Design

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Lecture/Lab Combination)

Prerequisite: CAD 105, IND 120

Development of a residential studio project, with an emphasis on universal design and sustainability, by implementing the design process. Requires research and application of residential design solutions through space planning, furniture & finish selections & specifications, estimating quantities & costs and understanding budget. Includes development of construction documentation and professional presentation techniques.

IND 152 Commercial Design I

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAD 105, IND 120

Introduces commercial design space planning and procedures for a variety of commercial project types. Emphasis will be placed on conceptual design, the programming and schematic design process, space planning and design documentation.

IND 160 Accessorizing

2 Credit Hours • 45 Contact Hours (Lecture, Lecture/Lab Combination)

Teaches how to assist clients in selection of art, antiques and accessories to aid in defining the character of the space. Styles and the eclectic mix of styles are covered, as well as placement and effective use of items.

IND 161 Introduction to Kitchen & Bath Design

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: CAD 105, IND 111

Provides an introduction to Kitchen and Bath Design, applying NKBA guidelines. Students are introduced to an overview of Interior Design principles as they apply to Kitchen and Bath design. One portfolio project is produced using hand-drafting skills. Students are encouraged to produce the project using skills attained in this course.

IND 201 Commercial Design II

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Lecture/Lab Combination)

Prerequisite: IND 220

Development of a commercial studio project, while applying knowledge of code & ADA requirements, building systems, finish & furniture specifications and sustainability. Requires research and application of commercial design solutions through the design process. Includes development of construction documentation and professional presentation techniques.

IND 205 Professional Practice for Interior Designers

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Introduces processes involved in creating and running a professional interior design business including legal, ethical, practical and professional requirements. Emphasis on business structures and practices, professional documentation and contracts, marketing techniques, job cost estimating, setting up industry accounts and project management methods. Students become familiar with business practices in both commercial and residential design firms and develop business plans and resumes.

IND 211 Interior Construction

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Introduces the student to interior building systems and assemblies, construction documents and details, and codes applicable to interior architecture. Student will apply this knowledge to various graphic projects and is encouraged to produce projects using the computer and CAD software.

IND 213 IND Portfolio Presentations

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: IND 151 or concurrent enrollment or IND 201 or concurrent enrollment

Prepare for the industry by refining presentation skills and completing portfolio for employment. Students learn to manipulate software renderings, hand-drafted renderings, model building, interior finish presentation boards to develop a digital and hard-copy portfolio for selling design through presentation. The students will learn various techniques for time management and time-saving skills for graphic communication.

IND 220 Interior Design III – Materials, Details, Codes & Specs

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: IND 120

Study of local & national building and fire codes and their application in developing projects with concern for the health, safety and welfare of the public. Understanding and illustrating interior building materials and specifications, interior details and

section drawings for custom elements through construction documentation.

IND 225 Lighting Design

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: IND 111

Teaches and applies basic knowledge of interior lighting technology and design. Content includes lamp classifications, color rendition, how lighting sources effect our perception of space, how to compute and control proper lighting levels, and how to communicate design information by means of a reflected ceiling plan and luminaire schedule. Students will be encouraged to produce projects using a variety of computer software applications.

IND 231 Sustainable Design

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Creates an awareness and understanding of ecological issues while emphasizing the use of environmentally friendly materials and resources that do not compromise the effectiveness of the design. This course also investigates the practice of design to reduce the effects on the environment using renewable materials in the design and building for both residential and commercial property. Its emphases are to learn to conserve resources and to reduce the negative impact on the environment.

IND 261 Advanced Kitchen & Bath Design

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Lecture/Lab Combination)

Prerequisite: IND 100, CAD 105

Continues Kitchen and Bath Design instruction while participating in the NKBA Student Design Competition for 1 bathroom and 1 kitchen remodel. Students will use NKBA Graphic Standards and Planning Guidelines to facilitate 2 sets of drawings, 2 materials boards, and 1 estimate and contract for the projects.

IND 265 Interior Design IV

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: IND 100, IND 111, IND 113, IND 120, IND 161

Exposes students to various types of software used by major companies in the practice of interior design (course is divided into three sections to allow for this exposure). A project will be completed for each of the different software programs.

IND 278 Workshop

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Note: Must have Department Chair permission to enroll

Provides students with an experiential learning opportunity.

IND 280 Internship

2-4 Credit Hours • Per Credit Hour, 45 Contact Hours (Internship)

Note: Must have Department Chair permission to enroll

Provides work experience in a business or industry.

IND 288 Practicum

1 Credit Hour • 30 Contact Hours (7.5 Lecture, 22.5 Practicum)

Note: Must have Department Chair permission to enroll

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

IND 289 Capstone

3-4 Credit Hours • Per Credit Hour, 22.5 Contact Hours (Lecture/Lab Combination)

Note: Must have Department Chair permission to enroll

Provides a demonstrated culmination of learning within a given program of study.

Interpreter Prep Program Courses

IPP 121 Aspects of Interpreting I

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 122 (Grade of B or higher), ENG 121

Note: Completion of ASL 123 or concurrent enrollment

Introduces the foundations of interpreting, explaining the historical context and the professional requirements for, being an interpreter. This course describes the professional considerations of communication variables, the Code of Professional Conduct, certifications, specialized work of interpreters, situational assessment concerns, and interpreting processing theories.

IPP 122 Aspects of Interpreting II

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 123 (Grade of B or higher), ENG 121, IPP 121 (Grade of B or higher)

Note: Completion of ASL 221 or concurrent enrollment

Provides a more in-depth study of the field of interpreting, expanding on the basics introduced in IPP 121. Lecture/discussion sessions will address ethical decision-making and cultural issues, as well as the various settings in which interpreters work. Students will have opportunities to observe various professional interpreters throughout the semester.

IPP 125 Oral Transliterating

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: IPP 121, IPP 132 or concurrent enrollment

Provides the student with the opportunity to develop basic oral communication facilitation skills. The course allows the student the advantage of learning the different techniques in rendering effective oral communication facilitation between consumers.

IPP 131 Text Analysis

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 122 (Grade of B or higher), ENG 121

Note: Completion of ASL 123 or concurrent enrollment

Focuses on learning and utilization of a sequenced method of preparing for interpreting assignments and analyzing English spoken text. Students will also increase their English and ASL vocabulary and learn to understand cultural implications in those languages.

IPP 132 Interpretation Analysis

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 123 (Grade of B or higher), ENG 121, IPP 131 (Grade of B or higher)

Note: Completion of ASL 221 or concurrent enrollment

Follows IPP 131 and is a continuation of the work begun in that course. The focus in this course is for students to interpret fully analyzed English texts and to analyze their own interpretations. Students will learn to see what they do well and what needs improvement as well as to develop exercises to improve their work. Students will continue the vocabulary work begun in IPP 131, further increasing English/Sign vocabulary and idioms.

IPP 145 Deaf People in Society

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: ASL 122 (Grade of B or higher), ANT 101 or concurrent enrollment, ENG 121

Note: Completion of ASL 123 or concurrent enrollment

Expands the student's knowledge of the impact of deafness on the development of language and cognition and the socialization of Deaf individuals in a Hearing World.

IPP 147 Survey of Deaf Culture

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ANT 101, ASL 123 (Grade of B or higher), ENG 121, IPP 145 (Grade of B or higher)

Note: Completion of ASL 221 or concurrent enrollment

Surveys the factors that contribute to defining Deaf persons as members of a cultural minority. This course will look at the impact of language on the culture as well as the role of norms, values, traditions, and minority groups within Deaf culture. Attention will also be given to identity and membership in Deaf culture.

IPP 205 Educational Interpreting

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ASL 123 (Grade of B or higher), ENG 121, IPP 121 (Grade of B or higher), IPP 131 (Grade of B or higher)

Note: Completion of ASL 221 or concurrent enrollment, IPP 122 or concurrent enrollment

Helps students gain insight into the roles of the interpreter/tutor in the mainstream environment, and to recognize the implications of child development and classroom interaction patterns on interpreting. Students also discuss tutoring strategies.

IPP 207 Specialized & Technical Communication

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: ASL 221 (Grade of B or higher), IPP 122 (Grade of B or higher), IPP 132 (Grade of B or higher)

Note: Completion of ASL 222 or concurrent enrollment

Expands their repertoire of specialized and technical sign terminology and apply them in appropriate contexts.

IPP 225 English to ASL Interpreting

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 221 (Grade of B or higher), COM 115, IPP 132 (Grade of B or higher)

Note: Completion of ASL 222 or concurrent enrollment; must be taken with IPP 227 and IPP 229

Provides the student an opportunity to develop consecutive and simultaneous interpreting skills, working from spoken English to American Sign Language.

IPP 227 ASL to English Interpreting

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 221 (Grade of B or higher), COM 115, IPP 132 (Grade of B or higher)

Note: Completion of ASL 222 or concurrent enrollment, must be taken with IPP 225 and IPP 229

Provides the student an opportunity to develop consecutive and simultaneous interpreting skills, working from American Sign Language to spoken English.

IPP 229 Transliterating

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 221 (Grade of B or higher), IPP 122, IPP 132 (Grade of B or higher)

Note: Completion of ASL 222 or concurrent enrollment; must be taken with IPP 225 and IPP 227

Provides the student with knowledge of transliterating techniques and ability to develop skills in transliterating spoken English into signed English. The student is introduced to the concept of transliterating and the differences in transliterating and interpreting.

IPP 235 Advanced Interpreting

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ANT 101, ASL 222, CIS 118 or CSC 105, COM 115, ENG 121, IPP 225, IPP 227, IPP 229 (Grade of B or higher for all prerequisite courses), MAT 107 (or higher)

Note: Should be taken with IPP 279 and IPP 281 in the final semester

Provides the student an opportunity to refine skills in ASL/English interpretation and transliteration.

IPP 279 Interpreter Seminar

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ANT 101, CIS 118 or CSC 105, COM 115, ENG 121, MAT 107 (or higher)

Note: IPP 235, IPP 281 must be taken concurrently with IPP 279. Must have GPA of B or higher; Grade of B or higher in ASL 222, IPP 225, IPP 227, IPP 229

Grading: P/F only

Provides the student with an open forum to discuss situations arising from interpreter assignments during internship and an opportunity to prepare for entering the interpreting field.

IPP 281 Internship

5 Credit Hours • 225 Contact Hours (Internship)

Prerequisite: ANT 101, CIS 118 or CSC 105, COM 115, ENG 121, MAT 107 (or higher)

Note: IPP 235, IPP 279 must be taken concurrently with IPP 281. Must have GPA of B or higher; Grade of B or higher in ASL 222, IPP 225, IPP 227, IPP 229

Grading: P/F only

Provides field experience interpreting in a supervised educational, community, service agency, or other setting.

Italian Courses**ITA 101 Conversational Italian I**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides the first course in a sequence for beginning students who wish to understand and speak Italian. The material includes basic vocabulary, grammar, and expressions that are used in daily situations and in travel.

ITA 111 Italian Language I

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Develops students' interpretive, interpersonal, and presentational communicative abilities in the language. Integrates these skills in the cultural contexts in which the language is used. Offers a foundation in the analysis of culture.

ITA 112 Italian Language II

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: ITA 111 (Grade of C or higher)

Expands students' interpretive, interpersonal, and presentational communicative abilities in the language across the disciplines. Integrates these skills with the study of the cultures in which the language is used. Offers a foundation in the analysis of culture and develops intercultural communicative strategies.

ITA 211 Italian Language III: AH4

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ITA 112 (Grade of C or higher)

Continues Italian Language II in the development of increased functional proficiency at the intermediate level in speaking, aural comprehension, reading, writing, and cultural competency in the Italian language. This course is conducted predominantly in Italian.

ITA 212 Italian Language IV: AH4

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ITA 211 (Grade of C or higher)

Continues Italian Language III in the development of increased functional proficiency at the intermediate mid-level in speaking, aural comprehension, reading, writing, and cultural competency in the Italian language. This course is conducted predominantly in Italian.

Japanese Courses**JPN 101 Conversational Japanese I**

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces beginning students to conversational Japanese and focuses on understanding and speaking Japanese. Covers basic vocabulary, grammar, and expressions that are used in daily situations and in travel.

JPN 111 Japanese Language I

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the Japanese language.

JPN 112 Japanese Language II

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: JPN 111 (Grade of C or higher)

Continues Japanese Language I in the development of functional proficiency in listening, speaking, reading, and writing the Japanese language.

JPN 211 Japanese Language III: AH4

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: JPN 112 (Grade of C or higher)

Continues the development of increased functional proficiency at the intermediate level in speaking, aural comprehension, reading, writing, and cultural competency in the Japanese language. This course is conducted predominantly in Japanese.

JPN 212 Japanese Language IV: AH4

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: JPN 211 (Grade of C or higher)

Continues the development of increased functional proficiency at intermediate mid-level in speaking, aural comprehension, reading, writing, and cultural competency in the Japanese language. This course is conducted predominantly in Japanese.

Journalism Courses**JOU 102 Introduction to Editing for Media**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the process of editing articles for publication in newspapers, newsletters, magazines, and digital media, emphasizing Associated Press (AP) style. This course covers many of the basics of journalism: reading, editing, grammar, mechanics, and design.

JOU 105 Introduction to Mass Media: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Places the mass media in an historical and cultural perspective, considering the validity, integrity, and influence of the media in a democracy.

JOU 106 Media News & Reporting

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Prerequisite: College Reading & Writing Literacy

Introduces newswriting, reporting, and interviewing with an emphasis on clarity, accuracy, timeliness, and fairness.

JOU 111 Principles of Advertising

3 Credit Hours • 45 Contact Hours (Lecture)

Employs design concepts, principles, and practices for advertising management for the mass media.

JOU 114 TV Production

3 Credit Hours • 45 Contact Hours (Lecture)

Covers principles and techniques of television production, as well as the role of the director/producer.

JOU 121 Photojournalism

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)
 Develops photojournalistic skills in capturing moments of real life from a unique personal viewpoint. Covers a broad overview of new media story-telling techniques. Students will focus on the way they observe the world around them and on the content and quality of their photographs.

JOU 206 Intermediate Newswriting & Editing

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)
Prerequisite: College Reading & Writing Literacy, JOU 106
 Presents how to gather information as an investigative reporter through research of local, state, and federal government publications, how to cover police beat and city hall, how our courts and regulatory agencies function, and how to cover other challenges such as the environment, religion, science, medical, public safety, and business.

JOU 215 Publications Production & Design

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)
Prerequisite: College Reading & Writing Literacy
 Provides for students' participation in the planning, writing, design, and production processes of a non-newspaper publication.

JOU 221 Newspaper Design I

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)
Prerequisite: College Reading & Writing Literacy
 Provides students with experience in newswriting, editing, design, layout, and advertising for newspaper production. Students may be required to work on the college newspaper or other news-oriented publications.

JOU 225 New Media

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)
 Explores techniques and approaches in the latest delivery methods for new media journalism, ethics, technological advances, and media literacy.

JOU 231 Introduction to Public Relations

4 Credit Hours • 60 Contact Hours (Lecture)
Prerequisite: JOU 106 (Grade of C or higher)
 Focuses on public relations and its role for the individual, the non-profit organization, business, and government; research methodology, principles and practices necessary to become a public relations practitioner; and media channels best suited to a persuasive appeal or crisis.

JOU 241 Feature & Magazine Writing

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ENG 121
 Focuses on trade, consumer, and technical publications, manuscript development with emphasis on nonfiction, submission techniques, and trends affecting the marketing of manuscripts both in print and digital media.

JOU 280 Internship

0.25 - 6 Credit Hours • Per Credit Hour, 45 Contact Hours (Internship)
Prerequisite: ENG 121, ENG 122, JOU 105, JOU 106
 Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

Law Enforcement Courses**LEA 101 Basic Police Academy I**

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)
Prerequisite: Permission of Academy Director.
Note: Taken concurrently with LEA 102, LEA 103, LEA 104, LEA 105, LEA 106, LEA 107, LEA 108, PED 102, PED 103
 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 102 Basic Police Academy II

12 Credit Hours • 270 Contact Hours (Lecture/Lab Combination)
Prerequisite: Permission of Academy Director.
Note: Taken concurrently with LEA 101, LEA 103, LEA 104, LEA 105, LEA 106, LEA 107, LEA 108, PED 110
 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge to perform the entry level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 103 Basic Law Enforcement Academy III

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: Permission of Academy Director.
Note: Taken concurrently with LEA 101, LEA 102, LEA 104, LEA 105, LEA 106, LEA 107, LEA 108, PED 110
 Enhances the standards established by the P.O.S.T. Board and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a Police Officer. Emphasis will be on expanding the P.O.S.T. curriculum to create a unique learning experience.

LEA 104 Basic Law Enforcement Academy IV

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: Permission of Academy Director.
Note: Taken concurrently with LEA 101, LEA 102, LEA 103, LEA 105, LEA 106, LEA 107, LEA 108, PED 110
 Enhances the standards established by the P.O.S.T. Board and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a Police Officer. Emphasis will be on expanding the P.O.S.T. curriculum to create a unique learning experience.

LEA 105 Basic Law

8 Credit Hours • 120 Contact Hours (Lecture)
Prerequisite: Permission of Academy Director.
Note: Taken concurrently with LEA 101, LEA 102, LEA 103, LEA 104, LEA 106, LEA 107, LEA 108, PED 110
 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a peace officer. Emphasis will be on United States Constitution, arrest, search and seizure, interrogation and confessions, rules of evidence, Colorado Criminal Code, Colorado Traffic Code, Colorado Children's Code, Liquor Code and controlled substances.

LEA 106 Arrest Control Techniques

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: Permission of Academy Director.
Note: Taken concurrently with LEA 101, LEA 102, LEA 103, LEA 104, LEA 105, LEA 107, LEA 108, PED 110
 Grading: P/F only
 Covers the skills, knowledge and abilities necessary to effectively maintain control of a suspect when making an arrest. Emphasizes the continuum of force and de-escalation of force.

LEA 107 Law Enforcement Driving

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: Permission of Academy Director.

Note: Taken concurrently with LEA 101, LEA 102, LEA 103, LEA 104, LEA 105, LEA 106, LEA 108, PED 110

Grading: P/F only

Covers the skills, knowledge and abilities required for operation of a law enforcement vehicle. Emphasizes defensive driving. Enables students to demonstrate skills by driving a vehicle under simulated conditions.

LEA 108 Firearms

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: Permission of Academy Director.

Note: Taken concurrently with LEA 101, LEA 102, LEA 103, LEA 104, LEA 105, LEA 106, LEA 107, PED 110

Grading: P/F only

Discusses the skills, knowledge and abilities necessary to safely use police firearms. Students will demonstrate skills by firing weapons on a firing range. The student will demonstrate basic safety techniques and will explain the firearms role within the continuum of force.

LEA 118 Police Report Writing

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or ENG 131

Identifies the areas of concern in regard to proper documentation of police related activities. Focuses on report writing skills, proper structuring of interviews, and chronological documentation of events. Incorporates proper sentence structuring, the use of correct terminology, and accuracy in written reports.

Literature Courses

LIT 115 Introduction to Literature I: AH2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment

Introduces fiction, poetry, and drama. This course emphasizes active and responsive reading.

LIT 121 Survey of World Mythology Literature

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment

Teaches students how to define mythology and how to read, analyze, and recognize mythic patterns and archetypes in diverse world literatures, both ancient and modern. The course will focus on identifying the elements of myth and analyzing how these elements appear in, and are altered by, cultural stories and authorial literature from multiple eras.

LIT 201 World Literature to 1600: AH2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment

Examines significant writings in world literature from the ancients to the seventeenth century. It emphasizes active reading and understanding of the works and their cultural backgrounds.

LIT 202 World Literature after 1600: AH2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment

Examines significant writings in world literature from the seventeenth century to the present. It emphasizes active reading and understanding of the works and their cultural backgrounds.

LIT 205 Ethnic Literature: AH2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment

Focuses on significant texts by ethnic Americans including African American, Native American, Latino/a, and Asian Americans. Emphasizes careful reading and understanding of the cultural and literary elements of the works.

LIT 211 American Literature to Civil War: AH2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment

Examines American literary works from pre-European arrival on the continent up to the Civil War, including works from diverse people that contributed to American literature. This course also explores historical and social contexts within various genres.

LIT 212 American Literature after the Civil War: AH2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment

Examines American literary works from 1865 to the present, distinguishing among literary themes, genres, and schools of thought that illustrate historical and social contexts across a multicultural spectrum.

LIT 221 British Literature to 1770: AH2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment

Examines major works of British literature from the Anglo-Saxon period through the 17th century. Explores the historical, political, and social contexts of the works as well as the major themes which reflect and/or critique the social assumptions and values of the times. Besides fostering an understanding of works essential to western culture, the course will examine how these works are still influential and relevant to contemporary thought and culture.

LIT 222 British Literature since 1770: AH2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment

Examines major works of British literature from the 18th century to the present. Explores the historical, political, and social contexts of the works and the major themes authors used to reflect and critique the social assumptions of their times. Besides fostering an understanding of works essential to western culture, the course examines how these works are still influential and relevant to contemporary thought and culture.

LIT 225 Introduction to Shakespeare: AH2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment

Explores works by William Shakespeare, focusing on a careful reading of these works as well as an exploration of pertinent contextual and historical information.

LIT 235 Science Fiction

3 Credit Hours • 45 Contact Hours (Lecture)

Examines the techniques and issues of science fiction through a close reading of a variety of writers in the genre.

LIT 246 Literature of Women: AH2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment

Examines the techniques and themes in literature by and about women by examining women's issues from various genres.

LIT 248 Native American Literature

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment

Examines oral and written literature created by Native American peoples. Emphasizes narrative and ceremonial literature from the oral tradition. Examines oratory, autobiography, essays, poetry, short stories, and novels as oral and written forms.

LIT 255 Children's Literature: AH2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment

Examines the criteria for selecting appropriate literature for children. Explores literature through a variety of genres, age levels, values taught through literature, and literary and artistic qualities of various texts.

LIT 257 Literature & Film

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment

Examines the relationship between literature and motion pictures, emphasizing the technique and interpretive function of filmmakers.

LIT 258 Latinx Literature

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment

Examines the cultural, historical, and social contexts impacting Latinx identities through critical reading and analysis. This course focuses on significant works, including poetry, drama, and/or fiction, by Latinx authors.

LIT 268 Celtic Literature: AH2

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment

Exposes the student to Irish literature. The course examines significant writings in Irish literature from the ancients through to the twenty-first century. The course emphasizes the careful reading and understanding of works of poetry, fiction, and drama, as well as their cultural backgrounds.

LIT 269 Popular Literature & Culture

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment

Explores special interests in literature, such as Detective Fiction and Science Fiction.

Machining Courses**MAC 100 Machine Shop Safety**

1 Credit Hour • 15 Contact Hours (Lecture)

Covers the hazards of a machine shop including health and safety, locating essential safety information from a code or other standard, location and use of safety and emergency equipment, and identifying and applying shop safety procedures.

MAC 101 Introduction to Machine Shop

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MAC 100 or concurrent enrollment

Covers safety procedures, use of bench tools, layout tools, power saws, drill presses, precision measurement tools, and various hand tools related to the machine shop. Also included are sharpening drill bits and general purpose turning tools for the lathe as well as determining speeds and feeds for both the lathe and the milling machine.

MAC 102 Print Reading for Machinists

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Instructs students in reading and understanding industrial prints. This course covers basic drafting and print standards, fundamentals of shape description, fundamentals of size description and annotation, industrial drawing types, and specialized parts and prints. Symbol interpretation, tolerancing and dimensioning standards are also covered.

MAC 110 Introduction to Engine Lathe

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MAC 101, MAC 102 or concurrent enrollment

Introduces basic lathe applications which will consist of identifying lathe components and controls, understanding turning safety, calculating speeds and feeds, using various tools and tool holders, identifying basic tool geometry, and the use of common lathe spindle tooling. Students will perform basic lathe operations, which will consist of facing, center-drilling, chuck turning, turning between centers, boring, grooving, tapers, knurling, and single point threading. Students will be required to produce specified

parts to a tolerance of +/- .004 in. and perform competencies set by manufacturing standards.

MAC 111 Intermediate Engine Lathe

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MAC 110

Teaches students to prepare single point external and internal unified screw threads to a Class 3 fit, generate angles with the compound rest within one degree, ream holes concentric within .001 inches, determine cutting speeds, and perform facing and turning operations.

MAC 112 Advanced Engine Lathe

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MAC 111

Prepares students to form radius, single-point isometric threads, turn spherical radius, use a radius gauge, and work within .0005 inches tolerance externally.

MAC 120 Introduction to Milling Machine

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MAC 101, MAC 102 or concurrent enrollment

Teaches students to identify the major parts of the vertical mill; align a vise; use an indicator, edge finder, and boring head; determine speeds and feeds; perform simple indexing; mill flat and square surfaces and slots; drill, bore, and tap holes; and work within a plus or minus .002 inch tolerance.

MAC 121 Intermediate Milling Machine

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MAC 120

Prepares students to determine hole locations by coordinates and degrees, use a rotary table, use a jig bore to drill holes by the coordinate method, and work within plus or minus .001 inch tolerance.

MAC 122 Advanced Milling Machine Operations

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MAC 121

Prepares students to indicate the head of a vertical mill, bore holes, drill holes at an angle, and work with tolerances of .0008 inches location and diameter.

MAC 205 Introduction to CNC Milling Operations

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAC 240, MAC 241

Introduces basic creating and editing of CNC mill programs. Introduction to G&M codes, math, speeds and feeds, production processes including process controls, and documentation associated with manufacturing will be covered.

MAC 206 CNC Milling Operations II

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAC 205, MAC 240, MAC 241

Further develops skills in writing and editing advanced CNC mill programs. G&M codes, math, speeds and feeds, production processes including multi-part, process controls, and documentation associated with manufacturing will be covered.

MAC 240 CAD/CAM 2D

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MAC 101

Provides the student with the essential concepts and techniques that are required to successfully create part geometry, generate tool path, verify tool path models, and post process the NC codes. The student will be exposed to a 2-axis machining, 3-axis machining wire frame and surface modeling, lathe programming, and DNC systems. Programming projects and models will be demonstrated in the CNC manufacturing lab.

MAC 241 CAD/CAM 2D Lab

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MAC 101, MAC 240

Requires students to produce a variety of lab exercises on robotic machinery in conjunction with MAC 240. Aspects of toolpaths for contour, drill, and pocket will be covered. Chaining geometry, setting parameters, and managing cutter compensations will be addressed in both multi-tool programs and re-machining operations. Coursework will primarily focus on 2D geometry projects.

MAC 245 CAD/CAM 3D

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MAC 101, MAC 240, MAC 241

Covers both the production and surfacing of three-dimensional geometry in a self-paced setting. Issues will be covered related to the production of wire frames, solids, surfaces, the joining of surfaces, joining of solids, managing construction planes, sweeping, rotating, and controlling parameter settings. A familiarity with Mastercam, CNC programming techniques, and CNC operations is recommended.

MAC 246 CAD/CAM 3D Lab

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MAC 245

Requires students to produce a variety of three-dimensional lab exercises on robotic machinery in a self-paced format in conjunction with MAC 245. Coursework will focus primarily on advanced geometry to include developing an understanding of CNC codes related to work offsets, cutter compensations, and tool management within CAD/CAM programs on the milling machine.

MAC 252 Practical Metallurgy

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MAC 101 or concurrent enrollment

Offers a study of metallurgical terms and definitions in an effort to understand both the behavior of metals and their service to industry. Characteristics during heating, cooling, shaping, forming, and the stresses related to their mechanical properties are covered. The theory behind the alloys, heat treatment processes, and the impact they have on strength, toughness, hardness, elasticity, ductility, malleability, wear resistance, and fatigue resistances is investigated.

MAC 280 Internship

3 Credit Hours • 135 Contact Hours (Internship)

Prerequisite: MAC 100, MAC 101, MAC 102, MAC 110, MAC 120, MAC 205, MAC 240

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

Management Courses**MAN 116 Principles of Supervision**

3 Credit Hours • 45 Contact Hours (Lecture)

Defines supervision, examines the functions of a supervisor, explains the necessary skills for successful supervision, relates supervision with human resources, and discusses supervisory challenges.

MAN 117 Time Management

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Provides a clear sense of purpose for the following: structured goals, overcome barriers, leverage practical strategies, tools, and techniques to develop and implement an effective time management framework.

MAN 125 Team Building

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Introduces the concept of working as a team member. This course emphasizes the ability to negotiate, collaborate, build consensus, and make quality decisions.

MAN 128 Human Relations in Organizations

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces interpersonal relations most directly linked to attainment of organizational and individual goals in the business world. Other factors include motivation, career development, and conflict resolution. It explores the importance of effective communication in organizations. Addresses organizational issues such as employee motivation, and customer complaints, as related to product or service defects.

MAN 200 Human Resource Management I

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: BUS 115

Provides an overview of the contemporary issues, theories, and principles used to effectively manage human resources. Topics covered include job analysis and design, talent acquisition and retention, planning and recruiting human resources, selecting employees, job placement, employee training and performance management, selecting employees, compensation and benefits, and retaining employees.

MAN 205 Event Planning:

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: BUS 115

Introduces the components of meeting planning, organization, personnel, finances, site selection, transportation, program design, promotion, arrangement of exhibits, and evaluation.

MAN 210 Aligning Technology with Business Strategy

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: BUS 115 recommended, but not required

Presents background on how an Information Technology (IT) Department works at the enterprise level. Discussion includes IT topics including: role and composition of the IT department in business, importance of IT security, IT federal regulations, and how business can successfully leverage technology.

MAN 216 Small Business Management

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ACC 101 or ACC 121, MAN 226, MAR 216

Examines the elements necessary for the successful formation of a new small business and to enhance the skills of those already involved in the operation of a small business. The course includes the development of a complete small business plan.

MAN 226 Principles of Management

3 Credit Hours • 45 Contact Hours (Lecture)

Provides an overview of the principles of management. Emphasis is on the primary functions of planning, organizing, staffing, leading and controlling with a balance between the behavioral and operational approaches.

MAN 240 Strategic Management

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: BUS 115, MAN 226 and sophomore standing

Presents the development of business and the integration of skills learned in prior business study, including strategy formulation, implementation, and evaluation. Focus is on the coordination of marketing, production, finance, accounting, and ethics and social responsibility to achieve competitive advantage.

MAN 246 Critical Issues in Marketing & Management

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: BUS 115 and sophomore standing

Examine current issues, practices, challenges and trends in the marketing and management environments including truth in advertising, promotional codes of conduct and a diverse workforce.

Manufacturing Technology Courses

MTE 130 Metrology

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Exposes the student to the principles of dimensional metrology. Students will learn how to use common measuring instruments relating to state-of-the-art manufacturing environments. Students will also learn the importance of Quality Control, TQM, and SPC processes as they relate to manufacturing environments. Use of a coordinate measuring machine will be delivered.

MTE 247 Strength of Materials

3 Credit Hours • 52.5 Contact Hours (30 Lecture, 22.5 Lecture/Lab Combination)

Prerequisite: CAD 255, EGT 103, MAT 107

Serves as an extension of Statics and includes the study of mechanical properties of materials and their limitations in engineering design by the study of stresses, strains, torsion forces, shear forces, and deflections placed upon these materials.

Marketing Courses

MAR 111 Principles of Sales

3 Credit Hours • 45 Contact Hours (Lecture)

Addresses ethical sales techniques, the role of selling, and the marketing process. Areas of emphasis include behavioral considerations in the buying and selling process and sales techniques.

MAR 117 Principles of Retailing

3 Credit Hours • 45 Contact Hours (Lecture)

Presents the basic principles and techniques of retailing, multi-channel retailing, retail market strategy, planning merchandise assortments and buying systems, merchandising, operations, layout, store organization, site location, and customer service through a variety of retail operations.

MAR 160 Customer Service

3 Credit Hours • 45 Contact Hours (Lecture)

Enables students to learn the relationship of self to customers, problem solve, and understand the importance of communicating with customers. Specific emphasis is given to managing customer expectations by building customer rapport and creating positive outcomes.

MAR 216 Principles of Marketing

3 Credit Hours • 45 Contact Hours (Lecture)

Presents the analysis of theoretical marketing processes and the strategies of product development, pricing, promotion and distribution, and their applications to businesses and the individual consumer.

MAR 220 Principles of Advertising

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAR 216

Examines the principles and practices of advertising and its relationship to business in the promotion of a business or organization. Areas of major emphasis include advertising principles, strategies, media, copy and layout, and ethical considerations.

MAR 240 International Marketing

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: BUS 115, MAR 216 and sophomore standing

Enables the student to explore the international marketing for U.S. products, and to explore the increasing competitive international environment and recent changes in the environment that have challenged U.S. business. The course is designed to make the reader an "informed observer" of the global market place as well as enabling him/her to develop skills to make marketing decisions in a global context.

MAR 249 Strategic Marketing

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: BUS 115, MAR 216 and sophomore standing

Focuses on the connections between a market-driven strategy, customer satisfaction, and profitable growth. This course explores development of marketing strategies within both small and large organizations, with emphases on strategy development, implementation, and evaluation.

Math Courses

MAT 025 Algebraic Literacy Lab

1 Credit Hour • 30 Contact Hours (Lab)

Note: MAT 025 must be taken concurrently with MAT 055

Grading: P/F only

Supports skill development for students registered in MAT 055. Topics covered in this course include those defined in MAT 055 and/or any pre-requisite skills needed by the student. For students with Next Gen Accuplacer QAS score 250-264, this course is a required co-requisite with MAT 055.

MAT 055 Algebraic Literacy

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: AAA 109 or concurrent enrollment**Note: MAT 055 must be taken concurrently with MAT 025*

Develops algebraic skills necessary for manipulating expressions and solving equations. Topics in the course include radicals, complex numbers, polynomials, factoring, rational expressions, quadratic equations, absolute value equations, systems of linear equations in two variables, related applications, and linear inequalities. This course prepares students for MAT 121 and MAT 123.

MAT 080 Mathematics for the Liberal Arts Literacy

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: AAA 109 or concurrent enrollment**Note: MAT 080 must be taken concurrently with MAT 120*

Supports skill development for students registered in MAT 120. Topics covered in this course include those defined in MAT 120 and/or any prerequisite skills needed by the student.

MAT 083 Math for Clinical Calculations Literacy

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: AAA 109 or concurrent enrollment**Note: MAT 083 must be taken concurrently with MAT 103*

Supports skill development for students registered in MAT 103. Topics covered in this course include those defined in MAT 103 and/or any prerequisite skills needed by the student.

MAT 085 Introduction to Statistics Literacy

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: AAA 109 or concurrent enrollment**Note: MAT 085 must be taken concurrently with MAT 135*

Supports skill development for students registered in MAT 135. Topics covered in this course include those defined in MAT 135 and/or any prerequisite skills needed by the student.

MAT 087 Career Math Literacy

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: AAA 109 or concurrent enrollment**Note: MAT 087 must be taken concurrently with MAT 107*

Supports skill development for students registered in MAT 107. Topics covered in this course include those defined in MAT 107 and/or any prerequisite skills needed by the student.

MAT 091 Applied Quantitative Lab

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: AAA 109 or concurrent enrollment**Note: MAT 091 must be taken concurrently with MAT 112*

Grading: P/F only

Supports skill development for students registered in MAT 103, MAT 107, MAT 108, or MAT 112. Topics covered in this course include those defined in these courses and/or any pre-requisite skills needed by the student. Students with Next Gen Accuplacer Arithmetic scores 255-264 or TradAccuplacer scores of EA 30-59 or AR40+, who are advised into MAT 103, MAT 107, MAT 108, or MAT 112 are required to co-enroll in this course.

MAT 092 Quant Lab

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: AAA 109 or concurrent enrollment**Note: MAT 092 must be taken concurrently with MAT 155*

Supports skill development for students registered in MAT 120, MAT 135, MAT 155 or MAT 156. Topics covered in this course include those defined in these courses and/or any prerequisite skills needed by the student. Students with Next Gen Accuplacer score QAS 230-239 or TradAccuplacer scores EA 80-84, who are advised into MAT 120, MAT 135, MAT 155 or MAT 156 are required to co-enroll in this course.

MAT 103 Math for Clinical Calculations

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Quantitative Literacy or concurrent enrollment in MAT 083

Covers the mathematical calculations needed for enteral and parenteral medication administration. It is designed for students in the health disciplines. Topics include measurements, conversion between various systems of measurements, and methods of solving problems related to drug dosage and medication administration.

MAT 107 Career Math

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Quantitative Literacy or concurrent enrollment in MAT 087

Covers material designed for career and technical students who need to study particular mathematical topics. Topics include measurement, algebra, geometry, statistics, and graphs. These are presented at an introductory level and the emphasis is on applications.

MAT 112 Financial Mathematics

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Quantitative Literacy or concurrent enrollment in MAT 091

Covers the fundamentals of financial mathematics. Topics include pricing, taxes, insurance, interest, annuities, amortization, and investments.

MAT 120 Mathematics for the Liberal Arts: MA1

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: College Quantitative Literacy or concurrent enrollment in MAT 080

Highlights connections between mathematics and the society in which we live and is intended for liberal arts majors. Topics include set theory and logic, mathematical modeling, probability and statistical methods, and consumer mathematics.

MAT 121 College Algebra: MA1

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: Next Gen Accuplacer AAF score of 245, SAT 590 or MAT 055 (Grade of C or higher)

Includes a brief review of intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and non-linear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series, permutations and combinations, the binomial theorem, and theory of equations. A graphing calculator is required.

MAT 122 College Trigonometry: MA1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: Next Gen Accuplacer AAF score of 280, SAT 610 or MAT 121 (Grade of C or higher)

Covers topics including trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional prerequisite course to the calculus sequence.

MAT 123 Finite Mathematics: MA1

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: Next Gen Accuplacer AAF score of 245, SAT 590 or MAT 055 (Grade of C or higher)

Covers topics including functions, matrix algebra, linear programming, and an introduction to probability and counting techniques. Emphasis is on applications. This course may include other topics such as statistics when time permits. This course is primarily intended for business, life science, or social science majors.

MAT 125 Survey of Calculus: MA1

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: Next Gen Accuplacer AAF score of 280, SAT 610 or MAT 121 (Grade of C or higher)

Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential, and logarithmic functions for business, life science, and/or social science majors.

MAT 135 Introduction to Statistics: MA1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Quantitative Literacy or concurrent enrollment in MAT 085

Includes data presentation and summarization, introduction to probability concepts and distributions, statistical inference — estimation, hypothesis testing, comparison of populations, correlation, and regression.

MAT 155 Integrated Math I: MA1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Quantitative Literacy or concurrent enrollment in MAT 092

Engages students in the concepts underlying elementary level mathematics. The course emphasizes critical thinking and applications. Topics include the structure of number systems, an analysis of numerical operations, set properties, numerical and geometric patterns, and a variety of problem-solving skills.

MAT 156 Integrated Math II: MA1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 155

Engages students in the concepts underlying elementary level mathematics. The course emphasizes critical thinking and applications. Topics include probability, statistics, measurement, Euclidean geometry, and algebraic methods.

MAT 166 Pre-Calculus: MA1

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: Next Gen Accuplacer AAF score of 280, SAT 610 or MAT 121 (Grade of C or higher)

Reviews college algebra and college trigonometry intended for those planning to take calculus. Topics include algebraic manipulations, properties of algebraic and trigonometric functions and their graphs, trig identities and equations, conic sections, polar coordinates, and parametric equations.

MAT 201 Calculus I: MA1

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: SAT 650, or MAT 121 and MAT 122 (Grade of C or higher), or MAT 166 (Grade of C or higher)

Introduces single variable calculus and analytic geometry. It includes limits, continuity, derivatives, and applications of derivatives as well as indefinite and definite integrals and some applications.

MAT 202 Calculus II: MA1

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: MAT 201 (Grade of C or higher)

Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals, and infinite series.

MAT 203 Calculus III: MA1

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: MAT 202 (Grade of C or higher)

Focuses the traditional subject matter of multivariable Calculus. Topics include vectors, vector-valued functions, partial derivatives, analytic geometry, multiple integrals, line integrals and applications.

MAT 204 Calculus III with Engineering Applications: MA1

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: MAT 202 (Grade of C or higher)

Focuses the traditional subject matter of multi-variable Calculus with an additional emphasis on word problems and problem solving. Topics include vectors, vector-valued functions, partial derivatives, analytic geometry, multiple integrals, line integrals, Stokes', Divergence Theorems and Green's Theorems, and applications.

MAT 215 Discrete Mathematics: MA1

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: MAT 201 (Grade of C or higher)

Concentrates on formal logic, algorithms, induction proofs, equivalence relations and graphs. This course is designed for mathematics and computer science students.

MAT 255 Linear Algebra

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 202 (Grade of C or higher)

Introduces linear algebra and emphasizes techniques of problem solving and introductory proofs. This course includes linear systems, matrices, determinants, vector spaces, linear transformations, eigenvalues, and eigenvectors.

MAT 265 Differential Equations: MA1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 202 (Grade of C or higher)

Explores techniques of problem solving and applications. Topics include first, second, and higher order differential equations, series methods, approximations, systems of differential equations, and Laplace transforms.

MAT 266 Differential Equations with Linear Algebra

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: MAT 203 or MAT 204

Concentrates on formal logic, algorithms, induction proofs, equivalence relations and graphs. This course is designed for mathematics and computer science students.

MAT 280 Internship

1 Credit Hour • 45 Contact Hours (Internship)

Note: Must have faculty consent to enroll

Provides student with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

Medical Assistant Professional Courses

MAP 110 Medical Office Administration

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces the administrative duties specifically used in medical offices.

MAP 120 Medical Office Financial Management

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: CIS 118 or CSC 105, HPR 139

Covers the practical uses of accounts and records with emphasis on accounting principles and analysis for use in a medical office. This course introduces outpatient coding with an ultimate goal to present a clear picture of medical procedures and services performed, such as Current Procedural Terminology (CPT) codes, correlating the diagnosis, symptom, complaint or condition, and International Classification of Diseases (ICD) codes, thus establishing the medical necessity required for third-party reimbursement.

MAP 138 Medical Assisting Laboratory

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: MOT 126 (Grade of C or higher) or MOT 136 (Grade of C or higher)

Introduces basic routine laboratory skills and techniques for collection, handling, and examination of laboratory specimens often encountered in the ambulatory care setting.

MAP 140 Medical Assisting Clinical Skills

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: MOT 126 (Grade of C or higher) or MOT 136 (Grade of C or higher)

Identifies the reasoning principles of the medical office procedure and identifies and list the individual steps of the medical office procedural skill. Presents ideas and experiences to develop logical tools used for examining, assessing and improving critical thought.

MAP 150 Pharmacology for Medical Assistants

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Quantitative Literacy

Provides an overview of pharmacology language, abbreviations, systems of measurement and conversions. The Controlled Substances Act, prescriptions, forms of medications, patient care applications, drug classifications/interactions, and safety in drug therapy and patient care are presented. Information regarding the measurement of medications, dosage calculations, routes of administration, and commonly prescribed drugs in the medical office is provided.

MAP 183 Medical Assistant Internship

5 Credit Hours • 225 Contact Hours (Internship)

Note: Program Coordinator Approval needed to register

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

MAP 189 Review for Medical Assistant National Examination

1 Credit Hour • 15 Contact Hours (Lecture)

Note: Should be in final semester of MOT degree program

Prepares the candidate sitting for the National Registration/Certification Examination for Medical Assistant through review and practice. These examinations are given with the intent of evaluating the competency of entry-level practitioners in Medical Assisting, therefore supporting quality care in the office or clinic.

MAP 280 Internship

4 Credit Hours • 180 Contact Hours (Internship)

Note: Program Coordinator approval

Provides the opportunity to supplement coursework with practical work experience related to their educational program, working under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

Medical Office Technology Courses**MOT 121 Medical Scribing**

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: HPR 139, HPR 208, CIS 118 or CSC 105

Provides basic knowledge, comprehension, and skills required to scribe medical dictation with accuracy, clarity, and timeliness, while applying the principles of professional and ethical conduct.

MOT 124 Medical Filing

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: CIS 118 or CSC 105, HPR 139, HPR 208

Outlines the rules and principles of medical records in ambulatory care settings. Topics will include hard copy and electronic medical/health records (EMR/EHR), records retention, release of information, HIPAA, and other legal topics relating to patient records. Data entry into EMR exercises will be included.

MOT 125 Basic Medical Sciences I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Introduces the anatomy and physiology, pathophysiology and drug therapy of the immune, musculoskeletal, and digestive systems. A discussion of pediatric implications as they relate to clinical physiology will also be covered. The scope of the material is limited to the medical office technology personnel.

MOT 126 Introduction to Clinical Skills

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Provides hands on experience with the basic clinical skills required for assisting with patient care in an ambulatory setting.

MOT 131 Advanced Insurance Billing & Coding

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MOT 208, MOT 209

Prepares the student to code correctly to optimize reimbursements for a full range of medical services by applying data to claim forms using official coding guidelines to eliminate insurance fraud and abuse.

MOT 133 Basic Medical Sciences II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Introduces the anatomy, physiology, pathophysiology, and drug therapy of the cardiovascular, respiratory, integumentary, and

senses systems. The scope of material is limited for the medical office technology personnel.

MOT 135 Basic Medical Sciences III

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Introduces the anatomy, physiology, pathophysiology, and drug therapy of the renal, reproductive, neurological, and endocrine systems. The scope of material is limited for the medical office technology personnel.

MOT 181 Internship: Administrative

2 Credit Hours • 90 Contact Hours (Internship)

Note: Program Coordinator Approval needed to register

Provides supervised placement in contracted facility for guided experience in the psychomotor, cognitive and affective learning domains acquired in an educational program. Positions are non-paid.

MOT 182 Internship: Clinical

3 Credit Hours • 135 Contact Hours (Internship)

Note: Program Coordinator Approval needed to register

Provides supervised placement in contracted facility for guided experience in the psychomotor, cognitive and affective learning domains acquired in an educational program. Positions are non-paid.

MOT 208 CPT Coding

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: MOT 125, MOT 133, MOT 135 or program coordinator approval**Note: MOT 208 and MOT 209 must be taken concurrently*

Teaches coding concepts using the CPT coding system for insurance claims. The course will introduce the CMS (centers for Medicare/Medicaid services) 1500 form. HCPCS (healthcare common procedure coding system) coding and modifiers concepts discussed as applicable.

MOT 209 ICD Coding

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: MOT 125, MOT 133, MOT 135 or program coordinator approval**Note: MOT 209 and MOT 208 must be taken concurrently*

Teaches coding concepts using the ICD (international classification of disease) coding system for insurance claims.

MOT 210 Intermediate Coding

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MOT 208, MOT 209

Employs techniques to analyze information from medical records and code it for insurance purposes. Level I & II and ICD (international classification of disease) coding will be utilized to create medical necessity for services.

Meteorology Course**MET 150 General Meteorology with Lab: SC1**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Quantitative Literacy

Provides an introduction to general meteorology and atmospheric sciences. Includes the composition and structure of the atmosphere and characteristics that affect the atmosphere, such as temperature, pressure, and moisture. Examines the development of weather system, such as storm systems, hurricanes, weather fronts, and cloud development. Stresses the concepts of climatology.

Multimedia Graphic Design Courses

MGD 102 Introduction to Multimedia

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Introduces the basic components of multimedia: text, graphics, animation, sound, and video. Students gain an introductory knowledge of various multimedia and design software programs. Students gain hands-on, technical, conceptual and aesthetic experience pertaining to the creation of multi-dimensional design and time-based media via an array of projects and demonstrations. Students will be introduced to career opportunities within multimedia fields.

MGD 103 Production Design

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Explores the use of tools, computer graphics techniques, and design layout principles to produce professional graphic designs. Studies include printing basics, typography, and digital color systems. Students use creative thinking to solve communication and design concepts for the output process.

MGD 104 Videography

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Offers an introduction to the principles and techniques of videotape production, including camera operation, basic script writing, lighting, sound, and basic digital editing. Detailed examination of the pre-production, production, and post-production processes, as well as aesthetics, will be included.

MGD 105 Typography & Layout

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Covers the creation and production of graphic projects, emphasizing the layout creative design process, problem solving, and research. Provides experience producing thumbnails, roughs, and digital layouts emphasizing refined creative typography.

MGD 106 Creativity & Visual Thinking

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Introduces the visual thinking skills necessary to understand and use the creative process, develop innovative concepts and forms, and to produce and analyze creative works. The underlying components of creative thinking, the creative process, and the creative economy are of primary concern in this class. This class is about concept development and sketching.

MGD 107 History of Design

2 Credit Hours • 30 Contact Hours (Lecture)
Explores the pivotal events and achievements that have led to the current state of graphic communication. Through lectures, slides, videos, class discussions, and research, students discover the creative thinkers, innovations, and breakthrough technologies that have shaped the evolution of visual communication, advertising, and industrial design today.

MGD 108 History of Illustration

2 Credit Hours • 30 Contact Hours (Lecture)
Presents a selected overview of the origins of illustration to the present giving equal emphasis to commercial illustration, fine art, and gallery illustration. Special attention is paid to stylistic changes, work methods, and social context.

MGD 109 Design & Color

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Covers the design process and creative problem solving; design and color theories, fundamentals, styles; stages area applied to workups; finished art; and presentations. Emphasis will be on line, form, composition, and continuity.

MGD 110 Lettering for Graphic Design

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Studies lettering and letter forms; the various methods and mediums used in freehand and mechanically-rendered lettering; the design of lettering; and practical applications of lettering in the field of graphic design.

MGD 111 Adobe Photoshop I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Concentrates on the high-end capabilities of Adobe Photoshop as an illustration, design and photo retouching tool. Students explore a wide range of selection and manipulation techniques that can be applied to photos, graphics and videos. Course competencies and outline follow those set out by the Adobe Certified Associate exam in Visual Communication Using Adobe Photoshop.

MGD 112 Adobe Illustrator I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Concentrates on the high-end capabilities of Adobe Illustrator as an illustration, design and vector drawing tool. Students learn how to use the tools to create digital artwork that can be used in web design, print media, and digital screen design. Course competencies and outline follow those set by the Adobe certified Associate exam in Visual Communication using Adobe Illustrator.

MGD 114 Adobe InDesign

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Introduces students to InDesign, a page layout program which integrates seamlessly with other Adobe design programs. InDesign delivers creative freedom and productivity to DTP. Class discussions and independent projects supplement hands-on classroom work.

MGD 116 Typography I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 112 or MGD 114
Introduces the history and concepts of typography as applied to graphic communications. Explores appropriate use of typography in a variety of design applications, emphasizing the basic design principles of typographic compositions and typesetting. Covers type recognition and typographic terms.

MGD 117 Introduction to Visual Communications

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Surveys visual communications, its history and impact on society. A foundation course for graphic design and illustration majors and a survey for non-majors who are interested in the field. Assignments require minimal artistic talent.

MGD 121 Painter for Digital Media

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Teaches students how to work with an illustration and paint software application called Painter. Color and relationships, repeat patterns, animation and digitization are among the topics covered in the course as students explore the possibilities of visual art using computers. Assigned projects cover a wide range of visual approaches. Painter provides an extra competitive edge for students.

MGD 132 Design & Color II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 109
Covers the creative problem-solving techniques for effective design and advertising continuity. Advanced exploration with design devices, theories, and applications will be discussed. Students will continue skills as well as design process development for ideas and concepts through all the layout stages to the finished presentation.

MGD 134 Drawing for Illustrators

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Covers fundamentals skills and theories of drawing and rendering line structure, form, value, texture, and composition. Application of drawing skills with various media for line quality as well as value and texture interpretations are also covered.

MGD 141 Web Design I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Introduces web site planning, design and creation utilizing HTML through industry-standard development tools. Emphasis is placed on applying stylistic decisions using cascading style sheets. Web-based considerations regarding color, typography, aesthetics, user interface design, and process integration with visual-based design tools will be explored.

MGD 143 Motion Graphic Design I: (Software)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Stresses creation of animation and dynamic interactive media for web and multimedia applications to a professional standard. Students will learn how develop projects for time-based media, key-frames, tweens and symbols. Students will learn how to use actions to trigger timeline events to create interactive behaviors.

MGD 153 3D Animation I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 102
Encompasses all major aspects of creating 3D characters using animation software. Using developed characters, the student will learn how to animate for personality.

MGD 156 Emergent Media Practices

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Explores techniques and approaches in the latest delivery methods for web, mobile, and emergent media communication. Students explore digital media outlets such as blogs, podcasts, e-zines and social networks. Concepts in video production, photography, journalism, marketing, advertising, public relations, editing and relevant skills necessary for agile mass communication are introduced. Students create communication pieces for internet-based, mobile, and emergent media.

MGD 161 Director I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Examines Macromedia Director, the leading authoring tool for interactive multimedia from the art director's perspective. Students will learn the basics of 2D animation for both computer presentations and the web. Interface design and scene development are emphasized. Hands-on projects include lingo scripts, behaviors, adding sound and digital video to student's movies.

MGD 164 Digital Video Editing I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 102
Introduces digital non-linear video editing. Students will capture, compress, edit, and manipulate video images using a personal computer. Assembly techniques including media management, editing tools, titles, and motion control, transitions and filters, and special effects are explored.

MGD 165 After Effects I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Provides the fundamental techniques for creating digital motion graphics such as 2D animations, animated logos, video graphics, etc. Classes cover relevant tools and techniques as well as industry standards, delivery methods, and output.

MGD 178 Seminar/Workshop

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Provides students with an exceptional learning experience.

MGD 180 Internship

1-12 Credit Hours • Per Credit Hour, 45 Contact Hours (Internship)
Note: Must have faculty consent to enroll
Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

MGD 201 Children's Book Illustration

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 109
Studies the artist's role as a visual storyteller, with completion of a finished project to portfolio. Covers adapting a story into character development, story boarding, visual, editing and constructing the final drawing. Special attention to specifications, deadlines, reproduction requirements, and professionalism.

MGD 202 Point of Purchase Packaging Design

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 109
Introduces the theories and principles that apply to three-dimensional design graphics for packaging and display; various dimensional marketing solutions to create dynamic visual effects concepts will be developed. Work layout stages and mock-ups will utilize various methods of cutting, folding, and assembly to explore the design concepts and their visual effects.

MGD 207 Illustration I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 134
Addresses methods and techniques used in the profession of illustration for advertising, brochures, books and other forms of printed communications. Course concentrates on developing expertise in producing line and continuous-tone, black-and-white art with emphasis on design and the creation of art for reproduction.

MGD 208 Illustration II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 207
Addresses methods and techniques used in the illustration profession beyond those covered in Illustration I. Course concentrates on developing expertise in producing color art for reproduction.

MGD 209 Illustration III

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 208
Continues Illustration II with added emphasis on conceptual development and proficiency in technique.

MGD 210 Illustration IV

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 209
Covers advanced illustration techniques including manual, computer and mixed media techniques.

MGD 211 Adobe Photoshop II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 111
Develops and reinforces image composition techniques learned in Adobe Photoshop I, MGD 111. Fundamentals are continuously reinforced as new design techniques are introduced.

MGD 212 Adobe Illustrator II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 112
Enables the student to continue development of electronic drawing skills through practice and use of state-of-the-art illustration software.

MGD 213 Electronic Prepress

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MGD 111, MGD 112

Explores in detail the electronic prepress process. Students examine steps for preparing a digital file for trapping, output considerations, and proofing techniques. Creating effective electronic designs and efficient use of today's software programs are also covered.

MGD 215 Painting for Illustrators

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Develops a more refined visual vocabulary, concentrating only on wet media both monochromatic and full color. Projects are more self-directed with emphasis on research, content composition, and professional expectation of the illustration in the graphic area. Working from both life and photographic subjects, the student will develop skills to achieve control of the painterly illustration media.

MGD 217 Typography II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MGD 102, MGD 109, MGD 111, MGD 112, MGD 114, MGD 116

Expands the investigation of typographic form, function and meaning within the context of contemporary visual language. Students will learn to effectively use typography as a solution to many diverse visual language applications. Students will build conceptualization skills while further experimenting with the aesthetic, formal and functional role typography plays in the creation of meaning. Students will learn how type is applied to grid systems and will explore an increasing complexity of content organization, encompassing multipage formats, websites, and systems design considerations.

MGD 221 Computer Graphics I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MGD 111, MGD 112, MGD 114, MGD 116

Introduces the process of generating computer design.

MGD 222 Computer Graphics II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MGD 221

Continues MGD 221 with advanced problems in generating computer design for graphics application, emphasizing production of individual fine art pieces.

MGD 223 Graphic Storytelling I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Addresses the artistic methods and techniques used in the development of sequential art. Course concentrates on developing conceptual and technical skills necessary to produce shorter format comic and comic strip art. Emphasis will be placed on contemporary B&W comic illustration techniques.

MGD 235 Word & Image 1: Comics

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Presents a selected overview of the origins and development of narrative illustration as it relates specifically to the genre of comics. Students will explore the fundamentals of developing and illustrating comics, encompassing single panel comics, and word + image-based comics.

MGD 241 Web Design II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MGD 141

Expands on previously learned fundamentals of HTML introducing cascading style sheets, DHTML, JavaScripts, and CGI forms. Color usage and interface design principles are emphasized in this course. This course will examine Web sites that employ more complex structures, optimal site architecture and navigation necessary for larger and more complex sites.

MGD 242 Web Architecture: Open Source Design

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MGD 141

Provides an overview of current open source tools used in the design industry for designing and implementing Web architecture. Course content changes with trends in the industry. Design focus is on information hierarchy in how it pertains to User Interface (UI) and User Experience (UX) and Search Engine Optimization (SEO). Topics include current content management systems (CMS) such as WordPress and/or Drupal, identifying web scripting languages, and an overview of open source programming and database integration.

MGD 243 Web Motion Graphic Design II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MGD 143

Stresses the complex creation of 2D animated motion graphics concentrating on the prior skills learned and the use of scripting and behaviors. Students will create motion graphics using these skills and apply them to web sites. Web site justification of motion graphics will be stressed, appraised, and weighed.

MGD 259 Management & Production

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MGD 111, MGD 114, MGD 116

Examines development of multimedia from a production standpoint. The process of transforming conceptual designs into actual projects is explored. Students study the management function of those tasks associated with the business end of development. Teamwork is emphasized throughout the course.

MGD 264 Digital Video Editing II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MGD 164

Looks at the more complex and advanced techniques of digital video editing. Areas of editing such as masking, filtering, blue/green screening, track mattes, and image mattes will be examined. Students will produce a movie project in this class and discuss practical ways to distribute to various audiences.

MGD 265 After Effects II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MGD 165

Provides advanced skills and techniques for creating digital motion graphics. The course covers relevant tools and techniques as well as industry standards, specialized techniques, and additional tools and resources.

MGD 266 DVD Authoring

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MGD 164

Introduces students to all aspects of DVD authoring; covers source acquisition, DVD production, interface design, organization, management, and appropriate DVD output solutions.

MGD 268 Business for Creatives

3 Credit Hours • 45 Contact Hours (Lecture)

Presents a guide to freelance work and a study of business practices and procedures and models unique to creative occupations (graphic design, web design, animation, fine arts). Discussion includes determining charges, business forms, business planning, tax structure, licenses and registration, self-promotion (resume, website, portfolio, business identity package). Course may include visits by professionals in the field and discussion of career opportunities in a quickly changing career field.

MGD 280 Internship

1-12 Credit Hours • Per Credit Hour, 45 Contact Hours (Internship)

Note: Must have faculty consent to enroll

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

MGD 289 Capstone

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MGD 109, MGD 111, MGD 112, MGD 114, MGD 116

A demonstrated culmination of learning within a given program of study.

Music Courses

MUS 100 Music Theory Fundamentals I

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the foundational elements of music theory. The course will cover clef reading, pitch and rhythmic notation, intervals, scales, key signatures, triads and diatonic chords, and an introduction to ear training and sight singing. The course will help beginning music students, including those who have limited background reading music notation and understanding the fundamentals of music theory.

MUS 101 Music Theory Fundamentals II

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MUS 100

Continues to develop fluency with foundational elements of music theory through continued drills and exercises. The course expands on principles of music notation, harmonization, intervals, chord analysis, rhythm, ear training, and sight singing. The course will help non-music major students who wish to further develop fluency in fundamental music theory and music notation.

MUS 105 Introduction to Computer Applications

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the use of computers in the music industry. Explores current use of MIDI instrument, MIDI sequencing, MIDI editing, audio editing, notation software, and set-up of Digital Audio Workstation.

MUS 110 Music Theory I

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MUS 101

Note: MUS 110, MUS 112, and MUS 131 must be taken together
Reviews and builds upon music fundamentals, diatonic harmony, phrase structure, and analysis. The course introduces voice leading and four-part harmony in root position and inversions.

MUS 111 Music Theory II

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MUS 110, MUS 112, MUS 131, MUS 132

Note: MUS 111, MUS 113 and MUS 132 must be taken together
Introduces harmony through four-part writing studying principles of harmonic progression, modulation, diatonic seventh chords, secondary dominants, keyboard harmony, and score analysis of binary and ternary form.

MUS 112 Ear Training/Sight-singing I Lab

1 Credit Hour • 37.5 Contact Hours (Studio)

Prerequisite: Follow sequence of MUS 100 or MUS 101

Note: MUS 110, MUS 112, and MUS 131 must be taken together
Provides exercises in sight singing, rhythmic reading, and melodic and rhythmic dictation. The course will include performance of melodies and rhythmic reading exercises. Ear training dictation

topics includes rhythm, intervals, diatonic scales, melody, triad types, and scales.

MUS 113 Ear Training/Sight-singing II Lab

1 Credit Hour • 37.5 Contact Hours (Studio)

Prerequisite: MUS 110, MUS 112, MUS 131

Note: MUS 111 and MUS 113 must be taken together

Continues to develop sight singing, rhythm reading, and dictation skills. The course includes expanded exercises in sight singing, rhythmic reading, and melodic and rhythmic dictation, as well as performance of melodies and rhythmic reading exercises. This course includes ear training topics.

MUS 120 Music Appreciation: AH1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces the study of music focusing on intelligent listening skills, the elements of music and their relationships, the musical characteristics of representative works and composers, common musical forms and genres of various Western, and non-Western historical style periods.

MUS 121 Music History Medieval thru Classical: AH1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment, MUS 100 or MUS 110, MUS 120

Provides an historical survey of Western art music from the Middle Ages into the Classical period, including styles, genres, composers, works, and significant cultural and historical influences upon the repertoire.

MUS 122 Music History Early Romantic Period to the Present: AH1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or concurrent enrollment, MUS 100, MUS 120

Provides a historical survey of Western art music connecting the classical period to the Romantic period and following to the present. This course includes the study of styles, genres, composers, works, and significant cultural and historical influences upon the repertoire.

MUS 123 Survey of World Music: AH1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121

Provides an overview of music from around the globe including folk, ethnic, non-Western, and popular styles. Develops basic listening skills and builds a historical/cultural context for world music styles to enable an understanding and appreciation of global music.

MUS 125 History of Jazz: AH1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Provides an overview of jazz history covering the basic materials of music and the forms, media, genres, and the historical and cultural framework of each style period. This course emphasizes the building of critical listening tools and the development of a jazz music vocabulary.

MUS 126 History of Rock & Pop

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Provides a survey of basic materials of music, musical forms, media, genres, and musical style of American rock and popular music from the late 19th century to the present. Focus of the course will be on studying genres and styles within the context of their role in American society, culture, and political landscape.

MUS 131 Music Class I

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)
Provides group instruction in music, introducing basic techniques, repertoire, and sight-reading.

MUS 132 Music Class II

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)
Provides group instruction in music, continuing to develop basic techniques, repertoire, and sight-reading.

MUS 133 Music Class III

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)
Provides group instruction in music, continuing to develop basic techniques, repertoire, and sight-reading.

MUS 134 Music Class IV

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)
Provides group instruction in music, continuing to develop techniques, repertoire, and sight-reading.

MUS 141 Private Instruction I: (Specify)

1-2 Credit Hours • 7.5-15 Contact Hours (Private Instruction)
Note: Must have Department Chair consent to enroll
Focuses on individual instruction: instrument, voice, conducting, or composition, first year, first semester.

MUS 142 Private Instruction II: (Specify)

1-2 Credit Hours • 7.5-15 Contact Hours (Private Instruction)
Note: Must have Department Chair consent to enroll
Continues individual instruction: instrument, voice, conducting, or composition, first year, second semester.

MUS 143 Private Instruction III: (Specify)

1-2 Credit Hours • 7.5-15 Contact Hours (Private Instruction)
Note: Must have Department Chair consent to enroll
Continues individual instruction: instrument, voice, conducting, or composition, second year, first semester.

MUS 144 Private Instruction IV: (Specify)

1-2 Credit Hours • 7.5-15 Contact Hours (Private Instruction)
Note: Must have Department Chair consent to enroll
Continues individual instruction: instrument, voice, conducting, or composition, second year, second semester.

MUS 151 Ensemble I: (Specify)

1 Credit Hour • 37.5 Contact Hours (Studio)
Provides opportunities for students to perform in ensembles. Ensembles will perform a diverse variety of musical styles and genres. Rehearsal techniques, performance skills, and professionalism are key components of this course. It is geared for first year, first semester students.

MUS 152 Ensemble II: (Specify)

1 Credit Hour • 37.5 Contact Hours (Studio)
Provides opportunities for students to perform in ensembles. Ensembles will perform a diverse variety of musical styles and genres. Rehearsal techniques, performance skills, and professionalism are key components of this course. It is geared for first year, second semester students.

MUS 153 Ensemble III: (Specify)

1 Credit Hour • 37.5 Contact Hours (Studio)
Provides opportunities for students to perform in ensembles. Ensembles will perform a diverse variety of musical styles and genres. Rehearsal techniques, performance skills, and professionalism are key components of this course. It is geared for second year, first semester students.

MUS 154 Ensemble IV: (Specify)

1 Credit Hour • 37.5 Contact Hours (Studio)
Provides opportunities for students to perform in ensembles. Ensembles will perform a diverse variety of musical styles and genres. Rehearsal techniques, performance skills, and

professionalism are key components of this course. It is geared for second year, second semester students.

MUS 167 Music Business I

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: College Reading & Writing Literacy, College Quantitative Literacy
Provides a foundational overview of the current, historic, and projected business practices in the music entertainment industry. Course provides opportunities to gain an understanding of the music entertainment industry including copyright, labels, publishing, licensing, distribution, marketing, finance, legal considerations, and current and future opportunities.

MUS 210 Music Theory III

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: MUS 111
Note: MUS 210 must be taken with MUS 212
Continues study of four-part music, including extended harmonic progressions of ninth, eleventh, and thirteenth chords, extended alteration, non-chord tones, modulation, and compositions.

MUS 211 Music Theory IV

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: MUS 210
Note: MUS 211 must be taken with MUS 213
Continues the study of chromatic harmony and analysis. This course introduces 20th and 21st century compositional techniques, including Impressionism, serialism, non-tertian harmonies, and further study in forms and analysis.

MUS 212 Ear Training/Sight-Singing Lab III

1 Credit Hour • 37.5 Contact Hours (Studio)
Note: MUS 210 must be taken with MUS 212. Follow sequence or have faculty consent to enroll.
Covers sight singing and melodic dictation using modulation and chromaticism. It covers harmonic dictation including diatonic and chromatic harmonic progressions. It will emphasize rhythmic reading and dictation including syncopation and asymmetrical meters.

MUS 213 Ear Training/Sight-Singing Lab IV

1 Credit Hour • 37.5 Contact Hours (Studio)
Note: MUS 211 must be taken with MUS 213. Follow sequence or have faculty consent to enroll.
Covers sight singing and ear training skills related to musical styles since 1900.

MUS 231 Music Class I:

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)
Note: Must have faculty consent to enroll
Group instruction in music. Introduces techniques, repertoire, and sight-reading.

MUS 232 Music Class II:

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)
Note: Must have faculty consent to enroll
Group instruction in music. Introduces techniques, repertoire, and sight-reading.

MUS 233 Music Class III:

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)
Note: Must have faculty consent to enroll
Group instruction in music. Introduces techniques, repertoire, and sight-reading.

MUS 234 Music Class IV:

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)
Note: Must have faculty consent to enroll
Group instruction in music. Introduces techniques, repertoire, and sight-reading.

MUS 241 Private Instruction

1-2 Credit Hours • 7.5-15 Contact Hours (Private Instruction)

Note: Must have Department Chair consent to enroll

1 credit primarily for non-music majors. 2 credits for music majors planning to transfer to 4-year school. Offers private instruction consisting of a thirty or sixty-minute lesson per week. Participation in a student performance is required at least once each term for 1 credit. Regular attendance at and participation in student performances is required for 2 credits. Second year, first term.

MUS 242 Private Instruction

1-2 Credit Hours • 7.5-15 Contact Hours (Private Instruction)

Note: Must have Department Chair consent to enroll

1 credit primarily for non-music majors. 2 credits for music majors planning to transfer to 4-year school. Offers private instruction consisting of a thirty or sixty-minute lesson per week. Participation in a student performance is required at least once each term for 1 credit. Regular attendance at and participation in student performances is required for 2 credits. Second year, third term.

MUS 243 Private Instruction

1-2 Credit Hours • 7.5-15 Contact Hours (Private Instruction)

Note: Must have Department Chair consent to enroll

1 credit primarily for non-music majors. 2 credits for music majors planning to transfer to 4-year school. Offers private instruction consisting of a thirty or sixty-minute lesson per week. Participation in a student performance is required at least once each term for 1 credit. Regular attendance at and participation in student performances is required for 2 credits. Second year, third term.

MUS 244 Private Instruction

1-2 Credit Hours • 7.5-15 Contact Hours (Private Instruction)

Note: Must have Department Chair consent to enroll

1 credit primarily for non-music majors. 2 credits for music majors planning to transfer to 4-year school. Offers private instruction consisting of a thirty or sixty-minute lesson per week. Participation in a student performance is required at least once each term for 1 credit. Regular attendance at and participation in student performances is required for 2 credits. Second year, fourth term. May be repeated for credit more than once per individual institution policy.

MUS 251 Ensemble I

1 Credit Hour • 37.5 Contact Hours (Studio)

Rehearses and performs various types of musical literature. Second year, first term.

MUS 252 Ensemble II

1 Credit Hour • 37.5 Contact Hours (Studio)

Rehearses and performs various types of musical literature. Second year, second term.

MUS 253 Ensemble III

1 Credit Hour • 37.5 Contact Hours (Studio)

Rehearses and performs various types of musical literature. Second year, third term.

MUS 254 Ensemble IV

1 Credit Hour • 37.5 Contact Hours (Studio)

Rehearses and performs various types of musical literature. Second year, fourth term.

Natural Resources Courses

NRE 100 Foundations of Forestry

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Presents the principles of forest science, dendrology, forest fire behavior, and silviculture principles.

NRE 102 Introduction to Natural Resources Management

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Covers an overview of our natural resources, the environmental concerns related to their management, and the agencies in charge of management of natural resources.

NRE 204 Range Management & Restoration

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Covers management of rangelands, important plants, rangeland communities, and restoration practices to restore disturbed ecosystems. Field measurement techniques of ecosystem components will be emphasized.

NRE 205 Wildlife & Fisheries Management Principles

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Covers theory, philosophy, and applications for study and management of wildlife and fisheries resources. Field and laboratory methods used in wildlife management also covered.

NRE 211 Environmental Policies & Economics

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 or ENG 131

Covers interactions, resources, economics and politics; government and environment policy. Evaluation of alternative resource use patterns and land use plans. Discussion and analysis of current environmental issues and the impact of economic growth.

NRE 212 Ecosystem Management

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ENV 101

Focuses on the larger landscape in order to integrate the human, biological, and physical dimensions of natural resource management. Collaborative management techniques are discussed.

NRE 214 Environmental Issues & Ethics

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on special environmental problems, current issues, or trends. Traditional and environmental philosophies are discussed. Students debate various environmental issues.

NRE 236 Public Relations of Natural Resources

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: COM 115

Offers an overview of professional communications with an emphasis on communication challenges encountered in environmental situations. Students will gain an understanding of direct and media communications with an emphasis on dialogue and research. Management planning and communications techniques will be explored as they apply to environmental case situations. Provides students with skills necessary for working directly or indirectly with the media and gives a broad understanding of the importance of customer service and outreach in environmental and natural resources fields.

NRE 278 Workshop/Seminar

1-6 Credit Hours • Per Credit Hour, 15 Contact Hours (Seminar)

Provides students with an experiential learning opportunity.

NRE 280 Internship

3 Credit Hours • 135 Contact Hours (Internship)

Note: Must have faculty consent to enroll

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

NRE 289 Capstone

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Provides a demonstrated culmination of learning within a given program of study.

Nursing Courses

NUR 106 Medical & Surgical Nursing Concepts

7 Credit Hours • 214.5 Contact Hours (51 Lecture, 13.5 Lab, 150 Clinical)

Prerequisite: Successful completion of the preceding nursing program coursework; BIO 202, MAT 103, NUR 109, NUR 112

Corequisite: BIO 216, NUR 150

Note: BIO 216 may be taken during the second semester in the Nursing Program

NUR 106 is the first medical/surgical nursing course. Building on NUR 109, this course provides for the acquisition of basic medical/surgical nursing theory, as well as application of mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered care to a developmentally and culturally diverse adult patient population experiencing various medical/surgical interventions. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the nurse. Application of knowledge and skills occurs in the nursing skills laboratory and a variety of clinical settings.

NUR 109 Fundamentals of Nursing

6 Credit Hours • 210 Contact Hours (30 Lecture, 90 Lab, 90 Clinical)

Prerequisite: BIO 111, BIO 201, BIO 202, ENG 121, PSY 235

Co-requisite: MAT 103

Note: BIO 202 and MAT 103 may be taken during the first semester in the Nursing Program

NUR 109 introduces the fundamental concepts necessary for safe, patient-centered nursing care to a diverse patient population while integrating legal and ethical responsibilities of the nurse. Introduces caring, critical thinking, the nursing process, quality improvement, and communication used when interacting with patients and members of the interdisciplinary team and relates evidence-based nursing practice. Application of knowledge and skills occurs in the nursing skills laboratory and a variety of clinical settings providing care to stable patients with common health alterations.

NUR 112 Basic Concepts of Pharmacology

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: Permission of program director. Admission to the program

Corequisite: NUR 109

Overview of the basic principles of pharmacology including major drug classifications and prototypes of commonly used medications. Principles of medication administration include aspects of best practice for safe, quality, patient-centered care. Central points include safety, quality improvement factors in the administration of medications, patient teaching, and variations encountered when administering medications to diverse patient populations across the lifespan.

NUR 150 Maternal - Child Nursing

6 Credit Hours • 171 Contact Hours (49.5 Lecture, 31.5 Lab, 90 Clinical)

Prerequisite: Successful completion of preceding nursing coursework; BIO 202, MAT 103, NUR 109, NUR 112

Corequisite: BIO 216, NUR 106

Note: BIO 216 may be taken during the second semester in the Nursing Program

NUR 150 provides for the acquisition of maternal/child nursing theory, as well as application of mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, family-centered nursing care to childbearing families and children that is developmentally and culturally appropriate. Incorporates evidence-based practice, standards of practice, quality improvement, and legal and ethical responsibilities of the nurse. Application of knowledge and skills occurs in the nursing skills laboratory and in a variety of maternal/child and pediatric clinical settings.

NUR 169 Transition into Practical Nursing

5 Credit Hours • 120 Contact Hours (30 Lecture, 90 Clinical)

Prerequisite: Permission of program director. NUR 106, NUR 150

Facilitates the transition into the role of the practical nurse with emphasis on distinguishing the defined practical nurse scope of practice related to clinical practice, communication, nursing process, ethical/legal issues, and leadership skills. The student practices in the role of the practical nurse in the associated clinical experience.

NUR 189 Transition from LPN to ADN

4 Credit Hours • 90 Contact Hours (30 Lecture, 30 Lab, 30 Clinical)

Prerequisite: Permission of program director. Acceptance into LPN/RN program

Facilitates transition of the LPN to new roles and responsibilities of the ADN, the nursing process, critical thinking, legal and ethical issues in nursing practice, and the nursing care of childbearing families and pediatric clients. Application of knowledge and skills occurs in the laboratory and maternal/child and pediatric clinical settings.

NUR 206 Advanced Concepts of Medical-Surgical Nursing I

6.5 Credit Hours • 202.5 Contact Hours (45 Lecture, 22.5 Lab, 135 Clinical)

Prerequisite: Permission of program director. Successful completion of preceding nursing program course work

Corequisite: NUR 211, NUR 212

NUR 206 builds on NUR 106 focusing on advanced concepts of nursing applied to care of patients with high acuity medical/surgical conditions. Builds on medical/surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered nursing care to developmentally and culturally diverse adult patients. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the professional nurse as applied in a variety of healthcare settings. Application of knowledge and skills occurs in the nursing skills laboratory and in a variety of clinical settings.

NUR 211 Psychiatric-Mental Health Nursing

4 Credit Hours • 105 Contact Hours (15 Lecture, 30 Lab, 60 Clinical)

Prerequisite: Permission of program director. Successful completion of preceding nursing program course work

Corequisite: NUR 206, NUR 212

Develops concepts of psychosocial integrity and emphasizes the function and responsibility of nursing in promoting and maintaining mental health of individuals and families. This course

emphasizes communication and caring through the application of the therapeutic relationship and nursing process in the care and treatment of common psychiatric clinical conditions/disorders.

NUR 212 Pharmacology II

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: Permission of program director. *NUR 106, NUR 150*
Corequisite: *NUR 206, NUR 211*

Builds on previously introduced pharmacological concepts and applies that learning to pharmacologic therapy to provide safe, quality, evidence-based nursing care to patients with complex healthcare needs. Focuses on safety and quality improvement factors in the administration of medications within a variety of healthcare systems. Advanced dosage calculations included.

NUR 216 Advanced Concepts of Medical-Surgical Nursing II

5 Credit Hours • 154.5 Contact Hours (34.5 Lecture, 120 Clinical)

Prerequisite: Permission of program director. *Successful completion of preceding nursing program course work*

NUR 216 is a continuation of *NUR 206*, focusing on complex medical/surgical conditions of the high acuity patient. Builds on medical/surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered nursing care to developmentally and culturally diverse adult patients experiencing high acuity medical/surgical conditions. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the professional nurse as applied in the acute care and high acuity settings. Application of knowledge and skills occurs in a variety of clinical settings.

NUR 230 Transition to Professional Nursing Practice

4 Credit Hours • 132 Contact Hours (24 Lecture, 108 Clinical)

Prerequisite: Permission of program director. *NUR 211, NUR 212*
NUR 230 is a seminar and practice capstone course that provides an integrative experience applying all dimensions of the professional nurse in the care of diverse patient populations across a variety of healthcare settings. All major concepts of the nursing program are addressed. Leadership and the management of multiple patients are emphasized. Application of knowledge and skills occurs in the clinical setting to facilitate an effective transition from student to registered professional nurse.

NUR 301 Integration into Baccalaureate Nursing Practice

3 Credit Hours • 45 Contact Hours (Lecture)

Explores professional nursing practice at the baccalaureate level. The course focuses is on knowledge and understanding of the professional nursing standards and the nursing role at the baccalaureate level.

NUR 302 Trends in Nursing Practice

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: *NUR 301 or concurrent enrollment*

Examines current issues that nurses encounter in the health care environment including their roles and responsibilities within the nursing profession.

NUR 303 Nursing Research / Evidence Based Practice

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: *MAT 135*

Analyzes concepts associated with nursing research, collection, and analysis of data with emphasis on integration of evidence-based practice within nursing. The course develops the skills for critiquing published research.

NUR 304 Informatics / Healthcare Technology

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: *NUR 301 or concurrent enrollment*

Explores concepts and applications related to the nurse's role in utilizing healthcare informatics involving patient care technology. This course will explore the impact of information management systems on the delivery of patient care, healthcare teams, and health outcomes.

NUR 305 Emergency Preparedness

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: *NUR 301 or concurrent enrollment*

Focuses on the nurse's roles and responsibilities in the most common types of disasters and how the nurse can deliver effective care in various emergency situations.

NUR 306 Gerontology Nursing

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: *NUR 301 or concurrent enrollment*

Focuses on optimizing health for the aging client within the framework of the nursing process. The course places emphasis on supporting the unique needs of the aging population.

NUR 307 Behavioral Health

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: *NUR 301 or concurrent enrollment*

Provides an overview of behavioral health promotion for individuals, families, and populations with behavioral health concerns. The focus of the course will explore the nurse's impact on behavioral health trends.

NUR 408 Legal & Ethical Issues Related to Professional Nursing Practice

3 Credit Hours • 45 Contact Hours (Lecture)

Emphasizes the ethical and legal obligations of professional nursing practice. The focus is on values clarification, ethical theory, and ethical decision-making models. Additionally, legal issues related to healthcare will be explored.

NUR 409 Leadership in the Nursing Profession

3.5 Credit Hours • 63.75 Contact Hours (41.25 Lecture, (2.75 Credits), 22.5 PRA (.75 Credits))

Focuses on the role of the professional nurse as a leader within healthcare. The course integrates concepts needed to assume leadership and management positions in the healthcare environment.

NUR 410 Community Health Nursing/Practicum

6 Credit Hours • 112.5 Contact Hours (67.5 Lecture, (4.5 Credits), 45 PRA (1.5 Credits))

Focuses on the role of the professional nurse in community-based practice settings, with an emphasis placed on health promotion, prevention, and optimal wellness of the community.

NUR 411 Senior Seminar

3 Credit Hours • 45 Contact Hours (Lecture)

Integrates theory into practice by building on previous concepts and knowledge.

Nursing Assistant Courses

NUA 101 Nurse Aide Health Care Skills

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Prepares the student to perform the fundamental skills of the nurse aide. Basic nursing skills, restorative services, personal care skills, safety, and emergency care issues are covered. Includes knowledge and/or principles of asepsis, OSHA and HIPAA regulations. Ethical behaviors, cultural sensitivity and principles of mental health will be addressed, as well as patient/resident rights.

NUA 102 Certification Exam Prep

0.5 Credit Hours • 15 Contact Hours (Lab)

Grading: P/F only

Helps prepare the student for the National Nurse Aide Assessment Program (NNAAP) examination.

NUA 105 Home Health Aide Theory

2 Credit Hours • 30 Contact Hours (Lecture)

Introduces the student to the expanding field of Home Health Nursing. The student will discover the uniqueness of Home Health Care and the vital role that the nursing assistant plays as part of the home care team. The student will learn how to assist home care patients with activities of daily living and maintain a safe, clean, and comfortable environment. The student will also learn the differences and challenges of caring for patients in their natural home environment versus institutional settings.

NUA 170 Nurse Aide Clinical Experience

1 Credit Hour • 30 Contact Hours (Clinical)

Prerequisite: NUA 101 or concurrent enrollment

Note: Must have current CPR for Health Care Provider (BLS) card, negative TB test or chest X-ray, and current immunizations

Grading: P/F only

Applies knowledge and skill gained in NUA 101 to patient care.

NUA 171 Clinical: Advanced Nurse Aide

1 Credit Hour • 30 Contact Hours (Clinical)

Prerequisite: NUA 101 or concurrent enrollment, NUA 170 or concurrent enrollment

Note: Must have current CPR for Health Care Provider (BLS) card, negative TB test or chest X-ray, and current immunizations

Grading: P/F only

Expands and applies knowledge and skill gained in NUA 170 to client care.

NUA 174 Acute Care Nurse Aide Skills

1 Credit Hour • 36 Contact Hours (Clinical)

Prerequisite: NUA 101 or concurrent enrollment, NUA 170 or concurrent enrollment, NUA 171 or concurrent enrollment

Note: Must have current CPR for Health Care Provider (BLS) card, negative TB test or chest X-ray, current immunizations and be 18 years of age.

Grading: P/F only

Explores the role of the acute care nurse aide in communication, safety issues and advanced nurse aide skills. Knowledge will be gained regarding patient findings to report to the nurse and will be proficient in performance of advanced acute care nurse aide skills. Caring for patients going to surgery or for special procedures will be discussed and patient rights in the acute care setting will be explored.

Occupational Safety Technician Courses**OSH 126 30-HR Construction Industry Standards**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides a 30-Hour OSHA certification course for the construction industry and participants will review the current OSHA standards contained in 29 CFR 1926. Participants that complete the course will receive a certificate of completion from the United States Department of Labor, Occupational Safety and Health Administration. The course is taught by instructors certified by the Occupational Safety and Health Administration.

OSH 127 10-HR Construction Industry Standards

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Provides a 10-Hour OSHA certification course for the construction industry and participants will review the current OSHA standards contained in 29 CFR 1926. Participants that complete the course will receive a certificate of completion from the United States Department of Labor, Occupational Safety and Health Administration.

The course is taught by instructors certified by the Occupational Safety and Health Administration.

Outdoor Studies Courses**OUT 101 Mountaineering**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: HWE 103

Provides students with a combination of skills and practical experience in the fundamentals of mountaineering. Emphasizes basic climbing skills and techniques, equipment usage, safety systems, mountain travel and awareness, problem solving and decision-making, high altitude climate and weather, wilderness ethics, and physical fitness.

OUT 102 Backcountry Navigation

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: HWE 103

Teaches efficient backcountry navigation in a field-based or classroom setting using topographic maps and other appropriate navigation tools.

OUT 108 Wilderness Survival Skills

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: HWE 103

This course emphasizes the physiological, psychological and practical principles of survival. Survival equipment, wilderness improvising techniques, and wilderness dangers are included.

OUT 109 Winter Wilderness Survival Skills

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: HWE 103, OUT 102, OUT 108, OUT 135

Emphasizes winter survival techniques in the nival environment at or near timberline. Focuses on winter ecology, basic snow science, and avalanche safety and rescue in a backcountry setting. This course includes field days and an overnight in a snow cave.

OUT 110 Caving I

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Introduces the student to the unique cave environment, formation of caves, cave biology, geology, and cave conservation. Reviews caving exploration techniques, caving equipment, caving safety and cave terminology.

OUT 111 Caving II

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: OUT 110

Introduces the student to the advanced science of speleology, with an in-depth study of the geology, biology, and hydrology of caves. Teaches the student advanced caving techniques with an emphasis on safety, and reviews advanced caving equipment.

OUT 112 Mountain Orientation

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Emphasizes camp and travel skills within a mountain environment as a self-contained group. Areas of study include backpacking skills, safety procedures, ecology, geology, geography, safe and efficient travel, Leave No Trace principles, and group dynamics.

OUT 113 Desert Orientation

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Emphasizes camp and travel skills within a desert environment as a self-contained group. Areas of study include backpacking skills, safety procedures, ecology, geology, geography, safe and efficient travel, Leave No Trace principles, and group dynamics.

OUT 114 Canyon Orientation

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Emphasizes camp and travel skills within a canyon environment as a self-contained group. Areas of study include backpacking

skills, safety procedures, ecology, geology, geography, safe and efficient travel, Leave No Trace principles, and group dynamics.

OUT 115 Snow Orientation

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Emphasizes camp and travel skills within a winter environment as a self-contained group. Areas of study include backpacking skills, safety procedures, ecology, geology, geography, safe and efficient travel, Leave No Trace principles, and group dynamics.

OUT 116 River Orientation

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Emphasizes camp and travel skills in whitewater river environments as a self-contained group. Areas of study include boat handling skills, safety procedures, ecology, geology, geography, safe and efficient travel, Leave No Trace principles, and group dynamics.

OUT 119 Flyfishing I

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Enables the student to gain the knowledge and skill of the fine art of flyfishing including the selection and use of appropriate equipment, fly-casting techniques, flyfishing entomology and guiding techniques. Includes several field trips to local flyfishing areas.

OUT 120 Flyfishing II

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Introduces students to the higher-level skill set required for a successful fly fishing guided experience. Topics will include lake and river dynamics and finding the fish, fly tying, as well as the effects of weather on fishing experiences will be discussed. Various methods of getting the client to the fish will be discussed including wading and floating moving water as well as a variety of both hard and inflatable boats. Emphasis will be placed on the presentation of the fly, successfully striking the fish, and catch and release techniques. Other topics directly related to the business of fly fishing such as risk management, etiquette, permitting and type of related careers will be discussed.

OUT 126 Mountain Biking

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Introduces basic mountain biking skills and techniques. The primary emphasis is to gain an understanding of the basic principles of mountain biking. Students develop skills and techniques for all riding situations, review bicycle anatomy, and basic maintenance and repairs.

OUT 129 Ice Climbing I

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Introduces technical (roped) ice climbing, including equipment selection and safety, knots, belaying and climbing, rappelling and climbing safety.

OUT 131 Rock Climbing I

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: HWE 103
Introduces basic rock climbing, improving dexterity, problem solving skills and the physical work capacity of an individual. Enables the student to gain an understanding of the general principles of climbing; how equipment works and how it is used; basic climbing skills and techniques; safety and climbing etiquette and terminology.

OUT 132 Rock Climbing II

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: HWE 103, OUT 131
Introduces lead climbing skills and techniques, problem solving skills and physical fitness. Emphasizes the general principles of lead climbing; proper usage of climbing equipment; development

of lead climbing skills and techniques; climbing ethics and safety; and terminology.

OUT 133 Technical Canyoneering

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Introduces students to a variety of travel techniques for non-technical and technical canyon environments. Topics include weather, canyon geography, navigation, group management and safety, technical rope work, climbing skills and self-rescue. A variety of wet and dry canyon travel techniques will be practiced, including walking, scrambling, climbing, rappelling, jumping, and swimming. Leave No Trace techniques in a desert canyon environment as well as a general knowledge of natural history and cultural history of the region will be emphasized.

OUT 134 Wilderness Ethics

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Emphasizes the motivation, aesthetics, and ethics of wilderness. Examines viewpoints from Native American, Western, historic, and modern environmental writers.

OUT 135 Risk Management for Outdoor Professionals

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Introduces risk management in the outdoor environment. Students will gain a better understanding of the inherent risks associated with various outdoor activities. They will learn how to analyze and minimize those risks, how to establish emergency protocols to react to those risks, and how to take the proper steps to resolve the consequences from those risks. After learning to identify, assess and reduce the risk, students will write a risk management plan specific to their area of interest. This course will cover outdoor leadership skills and delve into backcountry emergency situations and scenarios.

OUT 137 Kayaking

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Note: Instructor Signature Required
Provides basic kayak and water reading skills. The students will learn boating safety, hazard evaluation, terminology, whitewater river reading skills, paddling strokes, bracing techniques, peel out and eddy turns, and rescue and self-rescue techniques including wet exits, Eskimo rescues and introduction to and practice of the Eskimo roll.

OUT 138 White Water Rafting

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
This field experience course provides whitewater boat handling and reading skills through experience on selected rivers in Colorado and Utah. Students will learn river trip planning, safety procedures, equipment, logistics, camp management, hazard evaluation and minimum environmental impact on environments. Safe and efficient river travel, leadership and judgment development are emphasized.

OUT 139 White Water Rafting Guide

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Meets the requirements of Colorado Statute 33-32-105.5 which provides for the minimum qualifications of professional whitewater rafting guides. The classroom portion includes a review of the logistics, equipment, clothing, safety considerations, risk management, outdoor ethics, river reading fundamentals, and leadership skills. The remainder of the course will be spent with a licensed outfitter practicing all related and required skills while on the river.

OUT 140 Swift Water Rescue Tech I

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Trains and certifies river professionals and recreational users how to handle emergencies and rescue situations on the river. Topics include shallow water crossing, river swims, swimming rescues,

shore-based rescues, boat handling and boat-based rescues, related equipment and communication in a variety of rescue situations.

OUT 143 Backpacking

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Provides skills related to wilderness travel and outdoor adventure. Emphasizes knowledge of backpacking skills, survival techniques, proper physical conditioning, route finding, equipment selection, and an understanding and respect for the environment. The course incorporates lecture and discussion sessions followed by a weekend trip in the mountains.

OUT 144 Backcountry Cooking

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Focuses on menu planning, nutritional requirements for wilderness camping, and meal preparations. Includes cooking a backcountry meal.

OUT 156 Survival Plants in the Summer I

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Introduces the student to the summer season genus and species recognition of wild useful plants (edible, medicinal, poisonous and tool-craft) in all life zone categories (alpine subalpine, montane, foothill and desert) of Colorado. Other topics covered will be summertime identification challenges, macro and microenvironments, and dangerous lookalikes, and soils, latitudinal and elevational effects. Note: The Survival Plant series of classes can be taken in any order because each course academia is seasonal specific not nomenclature specific.

OUT 157 Survival Plants in the Fall I

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Introduces the student to the fall season genus and species recognition of wild useful plants (edible, medicinal, poisonous and tool-craft) in all life zone categories (alpine, subalpine, montane, foothill and desert) in Colorado. Other topics covered will be wilderness survival as it relates to wild useful botany, definition of a "weed", natives vs. non-natives, parasites and saprophytes, poisoning and habitat synergy. Note: The Survival Plant series of classes can be taken in any order because each course academia is seasonal specific not nomenclature specific.

OUT 158 Survival Plants in the Spring I

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Introduces the student to spring season genus and species recognition of wild useful plants (edible, medicinal, poisonous and tool-craft) in all life zone categories (alpine, subalpine, montane, foothill and desert) in Colorado. Other topics covered will be early ethno botany, botanical nomenclature, annuals, biennials and perennials, harvesting ethic, rare plants and seasonal changes. Note: The Survival Plant series of classes can be taken in any order because each course academia is seasonal specific not nomenclature specific.

OUT 159 Survival Plants: Rockies

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Introduces the student to the Survival Plants of the Pacific Northwest with a focus on the geological region of the Lewis & Clark country and the northern Great Basin. The following states will also be studied: Idaho, Montana, Wyoming, northern Utah, Nevada and Colorado. Class will utilize live, pressed, and dehydrated specimens, as well as slide presentations. Expanding students' knowledge of wild useful herbs; edible, medicinal, poisonous, and tool-craft plants not seen in earlier classes. Indoor class emphasis allows botanical exploration of wild useful plants year-round.

OUT 160 Survival Plants: Southwest

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Introduces the student to survival plants of the Southwest with a focus on the geographical region of Americas Great Southwest Deserts including the states of New Mexico, Arizona, southern Utah, Nevada & Colorado. In class utilization of live, pressed, and dried specimens. Indoor class emphasis allows botanical exploration of wild useful plants year-round.

OUT 161 Survival Plants: Summer II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Note: Students must have taken at least two in the series of OUT 156 Survival Plants in the Summer I, OUT 157 Survival Plants in the Fall I or OUT 158 Survival Plants in the Spring I (Grade of C better)

Introduces the student to useful wild plants of Summer not seen in earlier classes, as well as a review of botany and topics covered in previous classes. Students will learn wild food preparation, cooking, and wild preservation methods. Students will experiment with wild salads, raw vs. cooked dishes and aquatic plant cooking. In addition, advanced cordage construction methods will be covered. The wet method of cordage construction will be practiced.

OUT 162 Survival Plants: Fall II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Note: Students must have taken at least two in the series of OUT 156 Survival Plants in the Summer I, OUT 157 Survival Plants in the Fall I or OUT 158 Survival Plants in the Spring I (Grade of C better)

Introduces the student to useful plants of the Fall season not seen in earlier Survival Plants classes, as well as a review of botany learned in earlier classes. Students will continue learning wild food preparation, cooking, and preservation (dehydration). They will experiment with various wild plant food combinations, wild plant spices and flavorings. In addition, fire starters both primitive and modern will be discussed and practiced (weather permitting). Natural tenders, friction fires and fire bundles will be covered.

OUT 163 Survival Plants: Spring II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Note: Students must have taken at least two in the series of OUT 156 Survival Plants in the Summer I, OUT 157 Survival Plants in the Fall I or OUT 158 Survival Plants in the Spring I (Grade of C better)

Introduces the student to the useful wild plants of Spring not seen in earlier classes, as well as a review of botany and topics covered in previous classes. Students will learn and practice harvesting methods such as winnowing grain from chaff using the wind. Wild food preparation, cooking and preservation will be expanded. Prepared food categories will be wild teas and coffees, wild sprouts and wild sweets and deserts.

OUT 167 Basic Search & Rescue

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: HWE 103

Covers the basic fundamentals required for search and rescue in a wilderness environment. Includes tracking techniques and field trips.

OUT 168 Avalanche Awareness Level I

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: HWE 103, OUT 135

Emphasizes the latest information available about the study of avalanches, snow science, rescue equipment, and rescue techniques. Provides students with the knowledge and skills necessary to help instill good judgment and sound skills when making day-to-day travel decisions in the winter environment. This

course fulfills the National Ski Patrol's Basic (Level 1) Avalanche course requirements.

OUT 169 Avalanche Awareness Level II

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: HWE 103, OUT 135, OUT 168 (Grade of C or higher)
 Enhances students understanding of snow and avalanche phenomena, hazard evaluation, rescue, avalanche forecasting and avalanche hazard mitigation. Students will receive a certificate of completion stating that the course was taught following the guidelines of the American Avalanche Association.

OUT 187 Cooperative Education Internship

3 Credit Hours • 135 Contact Hours (Internship)
Prerequisite: REC 100, REC 211, REC 212, OUT 134, OUT 135
Note: Must have faculty consent to enroll
 Provides students an opportunity to gain practical experience in applying their occupational skills and/or to develop specific skills in a practical work setting. The instructor will work with the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer or work site supervisor.

OUT 201 Scuba Diving

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Note: Instructor Signature Required
 Provides basic instruction in scuba diving. Focuses on the knowledge and skills related to swimming and snorkeling, diving equipment, communications, the environment, safety, dive tables, and other pertinent information a student needs for safe scuba diving. This course prepares the student for open-water (PADI) certification.

OUT 202 Open Water Diver

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: HWE 103, OUT 201
Note: Instructor Signature Required
Grading: P/F only
 Requires student divers to demonstrate mastery of performance requirements for four (4) different open water dives to become a certified open water diver through the Professional Association of Diving Instructors (PADI).

OUT 203 Advanced Open Water Diver

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: HWE 103, OUT 202
Note: Instructor Signature Required
 Extends the student's prior knowledge of diving by introducing them to advanced techniques including deep diving, underwater navigation, night diving, peak performance buoyancy and multilevel diving. The classroom focuses on developing the student's knowledge, while the pool sessions focus on further developing the student's underwater skills. The open water training dives focus on improving the students diving skills as well as introducing the student to the different types of dives available.

OUT 204 Rescue Diver

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: OUT 203
Note: Instructor Signature Required
 Introduces the student to being able to help others in a rescue scenario. Teaches the student how to recognize problems at all stages in the rescue process. The classroom sessions focus on theories including stress management. The pool sessions focus on the practical application of assisting divers in trouble. The open water sessions focus on realistic situations. This fine tunes the student's ability to handle different situations and prepares the student for the Divemaster course.

OUT 205 Divemaster

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: OUT 204
Note: Instructor Signature Required
 Introduces the student to leadership level diving. It trains the student in several areas of focus: dive theory, waterman ship skills, problem solving abilities, role model behavior, student diver management and certified diver management. These skills are learned in both pool and classroom sessions. The practical application phase teaches the student how to deal with student divers as well as certified divers in a leadership role.

OUT 206 Assistant Scuba Instructor

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: OUT 205
Note: Instructor Signature Required
 Introduces the student to the skills needed to teach scuba diving. The classroom sessions start to develop the student's ability to set up teaching presentations, confined water presentations, open water presentations, standards and procedures for conducting Scuba diving courses and marketing of scuba to the general public. The pool sessions fine tune the student's ability to teach skills and demonstrate skills to training divers. The open water sessions show students how to evaluate divers' skills in a real-world environment.

OUT 207 Open Water Scuba Instructor

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: OUT 206
Note: Instructor Signature Required
 Provides the students with specific instructor skills and refines their teaching ability by showing them the most current methods for training divers. Students will fine-tune confined water teaching presentations as well as get more opportunities to polish their abilities to evaluate student diver skills in the confined and open water environments. Students will perform rescues and fine tune rescue abilities as well as demonstrating how to conduct a continuing education course.

OUT 211 Mountaineering Leadership

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Prerequisite: HWE 103, OUT 131, OUT 132, OUT 135, OUT 168, OUT 169
Note: Instructor Signature Required
 Develop the knowledge, ability and leadership skills necessary to instruct and safely lead a group on a mountaineering experience.

OUT 216 Challenge Course Facilitation

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
 Provides approaches to challenge course management including construction and maintenance of high and low elements, facilitation and group dynamics, risk management and safety, and challenge course philosophies.

OUT 218 River Orientation II

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: OUT 116, OUT 138
 This course provides advanced-level experience in whitewater raft handling and water reading skills through direct experiences on selected rivers. Students will learn advanced rafting techniques, river trip planning, advanced river safety procedures, equipment, logistics, camp management, hazard evaluation, minimum impact techniques, and the natural history of river environments. Added emphasis will be placed on approaching material from the professional river-guide's perspective. Minimum age: 17.

OUT 243 Wilderness First Aid

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
 Introduces wilderness medicine and basic life support skills. This course focuses on prevention, assessment, and treatment of

environmental illnesses. Recognizing and stabilizing life threats caused from trauma, calling for a rescue, and organizing an evacuation in the event of a wilderness emergency are also covered.

OUT 244 Wilderness First Responder

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Focuses on the prevention, assessment, and treatment of injuries and illnesses common to backcountry travel as well as how to manage a rescue. The course introduces patient assessment, standards of care, team dynamics, and critical thinking used during wilderness emergencies. This course is intended for outdoor enthusiasts and professionals who travel, recreate, and work in remote environments.

OUT 245 Wilderness First Responder Refresher

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Meets the standards for recertification of a Wilderness First Responder certification.

OUT 289 Capstone

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Prerequisite: HWE 103, REC 100, REC 211, REC 212, OUT 134, OUT 135, OUT 143

Note: Must have faculty consent to enroll

Emphasizes how outdoor recreation leadership can be integrated into future employment opportunities as well as future educational plans. Students will develop a professional portfolio and will take a comprehensive academic exit exam and a comprehensive skills exit exam.

Paralegal Courses

PAR 114 Computers & the Law

3 Credit Hours • 45 Contact Hours (Lecture)
Provides students with an opportunity to develop computer skills needed in the legal environment, including software applications, spreadsheets, databases, and Internet research.

PAR 115 Introduction to Law

3 Credit Hours • 45 Contact Hours (Lecture)
Provides an understanding of the role of paralegals, issues facing paralegals, the working of the legal system, and ethical questions. Legal terminology and an overview of the substantive areas of law will be discussed.

PAR 116 Torts

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ENG 121, PAR 115
A basic course in tort law, including negligence, intentional torts, and strict liability, with an emphasis on personal injury litigation.

PAR 117 Family Law

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ENG 121, PAR 115
This course covers domestic law, common property, dissolutions, adoptions, legal separation, and other family law issues.

PAR 118 Contracts

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ENG 121, PAR 115
This course covers the basic principles of contract law.

PAR 125 Property Law

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ENG 121, PAR 115
Focuses on real estate law, ownership, sale, leasing, financing, and government regulation of land.

PAR 127 Legal Ethics

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ENG 121, PAR 115

Explores the parameters of professional responsibilities and value systems for paralegals and related occupations.

PAR 201 Civil Litigation

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ENG 121, PAR 115
Focuses on an intensive study of the legal process including the Federal and Colorado Rules of Civil Procedure.

PAR 202 Evidence

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ENG 121, PAR 115
Introduces the student to State and Federal Rules of Evidence and application to the trial process.

PAR 205 Criminal Law

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ENG 121, PAR 115
Introduces basic concepts of criminal law and criminal procedure, including Colorado statutes and Rules of Procedure.

PAR 206 Business Organizations

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ENG 121, PAR 115
Focuses on the study of the major types of business organizations.

PAR 208 Probate & Estates

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ENG 121, PAR 115
Provides an understanding of the creation and administration of an estate, including wills and trusts, and the probate process.

PAR 209 Constitutional Law

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ENG 121, PAR 115
Emphasizes the study of the powers of government as they are allocated and defined by the United States Constitution.

PAR 213 Legal Research & Writing I

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ENG 121, PAR 115
Provides an introduction to legal research and writing.

PAR 280 Internship

3 Credit Hours • 135 Contact Hours (Internship)
Prerequisite: PAR 115
Note: Must have faculty consent to enroll
Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

PAR 287 Cooperative Education

3 Credit Hours • 135 Contact Hours (On-the-Job-Training)
Prerequisite: PAR 115
Provides students an opportunity to gain practical experience in applying their occupational skills and/or to develop specific skills in a practical work setting. The instructor will work with the student to select an appropriate work site, establish learning objectives, and to coordinate learning activities with the employer or work site supervisor.

Park Ranger Course

PRA 205 Resource Interpretation

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Provides a basic course in natural and cultural resource interpretation. Examines the philosophy, techniques, and skills necessary to produce exciting and relevant resource interpretation projects. Incorporates interpretive plans and various techniques used in the field of resource interpretation and public education.

Covers the history and development of environmental education and natural/cultural resource interpretation. Multi-use conflict resolution of public education and resource interpretation are emphasized.

Pharmacy Technician Courses

PHT 111 Introduction to Pharmacy

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces the student to the practice of pharmacy and the work that pharmacy technicians perform. The course provides an overview of careers within the field; educational, certification and accreditation requirements; ethical and legal responsibilities; pharmacology; as well as a variety of issues that touch on attitudes, values and beliefs of successful pharmacy technicians.

PHT 112 Pharmacy Law & Ethics

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces the laws, regulations and agencies that pertain to pharmacy practice and the role that technicians play to ensure compliance. Establishes a foundation of ethical behavior and decision making and discusses the consequences of violating laws and ethical principles.

PHT 114 Computer Skills for Pharmacy Technicians

1 Credit Hour • 15 Contact Hours (Lecture)

Introduces basic pharmacy and computer terminology and applications of a pharmacy management system. Focuses on the practice of pharmacy and the multiple operations that contribute to safe and effective patient care and discusses the roles and responsibilities of pharmacists and pharmacy technicians in computer-based systems. This course includes integration of an actual pharmacy operation application and allow students hands on technical experience.

PHT 115 Pharmacology I

3 Credit Hours • 45 Contact Hours (Lecture)

Presents the fundamentals of pharmacology, the pharmacokinetic phases, and the basic concepts of normal body function. This course examines diseases which impact the various body systems and the drugs used to treat such diseases, emphasizing disease state management and drug therapy.

PHT 116 Institutional Pharmacy

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Prerequisite: MAT 103 (Grade of C or higher), PHT 111 and instructor signature

Note: PHT 235 recommended, but not required

Explores the role of pharmacy technicians and the practice of pharmacy in the institutional setting. This course covers institutional and pharmacy organization, terminology, medication distribution systems, packaging, and preparation of intravenous admixtures. This course includes a hands-on simulation component in preparation for institutional practice.

PHT 118 Pharmacology II

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: PHT 115

Examines the disease states which impact the various body systems and the drugs used to treat such diseases. This course emphasizes disease state management and drug therapy. Serves as the second part of the two-part presentation of the basic concepts of pharmacology.

PHT 119 Community Pharmacy

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Prerequisite: MAT 103 (Grade of C or higher), PHT 111, and instructor signature

Note: PHT 235 recommended

Provides a basic understanding of both general and specific tasks and responsibilities involved in the practice of pharmacy in a community setting. Emphasizes chain and independent community pharmacy practice, other related practice settings (such as consultant pharmacy, mail order pharmacy and nuclear pharmacy). Enables the student to obtain hands-on experience in the important technical duties of dispensing and compounding. The course will utilize a lecture-informal discussion format combined with a series of practice skills laboratory sessions.

PHT 170 Pharmacy Clinical: Institutional

4 Credit Hours • 180 Contact Hours (Internship)

Prerequisite: PHT 116, PHT 118, PHT 119, PHT 235

Provides an opportunity for the completion of practical work experience related to the educational program.

PHT 171 Pharmacy Clinical: Community

4 Credit Hours • 180 Contact Hours (Internship)

Prerequisite: PHT 116, PHT 118, PHT 119, PHT 235

Provides an opportunity for the completion of practical work experience related to the educational program.

PHT 235 Pharmaceutical Calculations & Compounding Techniques

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Note: Must have faculty consent to enroll

Develops the skills necessary to perform calculations essential to the duties of pharmacy technicians in a variety of contemporary settings. This course also applies these skills in hands-on compounding of pharmaceutical products emphasizing the importance of accuracy, quality and infection control.

PHT 250 Sterile Compounding & Aseptic Technique

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: PHT 170, PHT 171

Note: Instructor Signature Required

Provides overview of methods and regulation of sterile products as well as instruction and training for the mastery of aseptic technique and the successful production of sterile preparations. This course prepares students for passing process validation checklists and provides comprehensive coverage of all procedures and techniques related to the skill sets necessary for sterile compounding.

PHT 255 Advanced Pharmacy Practice & Nontraditional Roles

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: PHT 170, PHT 171

Note: Instructor Signature Required

Compares nontraditional roles and responsibilities for pharmacy technicians. Course will compare career opportunities for pharmacy professionals as pharmacy practice expands into many new areas.

Philosophy Courses

Philosophy courses can be taken in any order.

PHI 111 Introduction to Philosophy: AH3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces significant theoretical and practical questions and emphasizes understanding the meaning and methods of philosophy. Includes: the human condition, logic, reality, knowledge, freedom, history, ethics, and religion.

PHI 112 Ethics: AH3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines human life, experience, and thought to discover and develop the principles and values for pursuing a more fulfilled existence. This course examines ethical theories designed to both justify moral judgments, as well as apply these ethical theories to a selection of personal and social issues in the world today.

PHI 113 Logic: AH3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking and the formal analysis of arguments. Emphasizes the development of decision-making and problem-solving.

PHI 114 Comparative Religions: AH3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces the major religions of the Eastern and Western world. Covers Hinduism, Buddhism, Confucianism, Daoism, Judaism, Christianity and Islam. Utilizes methods of religious studies to understand the historical development of each religious tradition as well its worldview and teachings.

PHI 115 World Religions – West: AH3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces students to religions of the Western world: Judaism, Christianity, and Islam. Utilizes the methods of religious studies to understand the historical development of each religious tradition in terms of communities, cultural context, and modern manifestations, paying particular attention to differences between sects, denominations, schools, and factions within each tradition. Focus will include the examination of the charismatic leaders, prophets, and narratives that inform the worldview of each tradition.

PHI 116 World Religions – East: AH3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces the major religions of the Eastern world: Hinduism, Buddhism, Confucianism and Daoism. Utilizes the methods of religious studies to understand the historical development of each religious tradition in terms of communities, cultural context, and modern manifestations, paying particular attention to differences between sects, denominations, schools, and factions within each tradition. Focus will include the examination of the charismatic leaders, prophets and narratives that inform the worldview of each tradition.

PHI 142 New Testament

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

This course surveys the literature of the early Christian era, from its inception to approximately 150 C.E. The New Testament as well as selected non-canonical writings from the period is examined. The course focuses on the interpretation of these texts in light of the cultural milieu from which they arose. Particular attention is paid to the influence of ancient literary conventions upon the Christian writers of this time.

PHI 201 Social & Political Philosophy

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: PHI 112

Addresses a single topic among those relevant to social and political philosophy such as political rights, political freedom, social obligations, or democracy.

PHI 205 Business Ethics: AH3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines major ethical theories and then applies ethical decision-making criteria to various moral issues and challenges in a business environment. This course will include issues such as job discrimination, worker's rights, consumerism, advertising, whistleblowing, product safety, responsibility to the environment, as well as compassionate and fair responsibility to society.

PHI 214 Philosophy of Religion: AH3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Focuses on the critical analysis and evaluation of the fundamental concepts, ideas, and implications within religious worldviews. This course includes issues such as the nature of God, other conceptions of ultimate reality, arguments concerning God's existence, the problem of evil and suffering, faith and reason, metaphysical foundations for ethics, the phenomenon of religious experience, and religious diversity.

PHI 218 Environmental Ethics: AH3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Analyzes theories of the value of the natural world. Topics may include the relation between scientific and moral principles; theories of the moral worth of persons, animals, plants and other natural objects; historical, religious and cultural influences on conceptions of nature; alternative accounts of human relationships and responsibilities to nature; and the connection between moral and political values and economic policies.

PHI 250 Eastern Wisdom

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Covers fundamental theories of Indian, Chinese, Japanese, and Muslim metaphysics, epistemology, ethics, and aesthetics, focusing on the development of Hinduism, Buddhism, Confucianism, Taoism, Shintoism, as well as Islam's development in the East.

Photography Courses

PHO 101 Professional Photography I

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces black and white photography as a fine art medium and develops skills necessary for basic camera and lab operations.

PHO 102 Professional Photography II

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: PHO 101

This course is a further exploration in camera and lab operations with an emphasis on individual creativity. It includes the development of a comprehensive portfolio.

PHO 105 Photo & Computer Orientation

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

This course will orient the Professional Photography student with lab operations and procedures of computer labs and networks. Instruction of the numerous applications included with Mac OS-X including Safari, iTunes, iPhoto, iDVD, iMovie, disc burner, Adobe Acrobat Reader, word processing and spreadsheet applications will be covered.

PHO 120 Fundamentals of Photography

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces students to photography through a combination of lectures, demonstrations, assignments, and critiques. Students will learn to see photographically via an exploration of the basic

tools, techniques and aesthetics of photography, with an emphasis on the creative use of camera controls, exposure, an overview of film and digital processing, and an awareness of the critical issues in contemporary photography.

PHO 143 Perception & Photography I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
This course presents the fundamentals of visual perception, design, and seeing in the photographic medium. Topics include: elements of composition, Gestalt principles and the psychology of seeing, conceptual and perceptual exercises, depth representation, figure/ground, and the development of ideas.

PHO 165 Outdoor Portrait Photography

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Provides students with an experiential workshop, where they learn techniques for photographing a single person or groups outdoors under varied conditions.

PHO 204 Commercial Studio Lighting

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ART 138, PHO 120 or PHO 121 or concurrent enrollment

Explores the creative uses of studio lighting from the perspective of fine art and commercial photography with an emphasis on three-dimensional object photography including, lighting techniques, backgrounds, working with shadows and highlights and photographing flat art.

PHO 205 Professional Digital Photo I

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: ART 139 or PHO 120

Introduces the basic concepts of digital imaging as applied to photography. Using applicable technology and hands on experience, modern developments are presented leading to the present applications of digital imaging which combine traditional photographic ideas with electronic media. Enables the student to learn how to operate image manipulation software using a variety of scanning equipment, software tools and output devices by executing new assignments and applying these technologies to their photographic process.

PHO 206 Professional Digital Photo II

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: PHO 205

Expands upon the beginning digital photography class. Focuses on digital photography in terms of design and communication factors including color, visual design, lighting, graphics, and aesthetics.

PHO 226 Digital Workflow Management

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ART 139 or PHO 120

Note: It is recommended to take MGD 111 before PHO 226

Teaches computer aided photography and darkroom techniques. The emphasis of this course is image-editing software, which can be used to color correct, retouch and composite photographic images. Other topics include image acquisition, storage, file management, special effects, hard copy and web-based image output.

PHO 232 Professional Portraiture

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ART 144 (Grade of C or higher)

This course covers the technical and aesthetic aspects of studio and location portrait photography. Course topics include lighting ratios, lighting styles, location lighting, small system flash, light modifiers for portraiture, metering, composition, equipment and

posing. Career paths in the field of portraiture such as weddings, environmental, editorial and studio portraits are covered.

PHO 233 Glamour & Fashion Photography

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Introduces students to the technical and aesthetic aspects of studio and location portrait photography in the areas of glamour, beauty, and fashion photography. Course topics include: strobe lighting, lighting styles, studio and location lighting, past and current trends in the industry, creativity and posing. Career paths in the field of glamour, beauty and fashion photography are also covered.

PHO 234 View Camera/Lighting Technique

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ART 139 or PHO 120

Instruction in the use of large format cameras and strobe lighting for product photography is the focus of this course. Topics include types of large format cameras, view camera movements for depth of field and perspective control, lighting ratios, special lighting techniques, light modifiers, bellows factors, and the specific methods of lighting different objects and surfaces such as glass and metal.

PHO 235 Architectural Photography

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ART 139 or PHO 120

Covers the more advanced aspects of commercial/ architectural photography. Students will explore photographing subjects ranging from products to buildings with an emphasis on meeting the design demands of commercial clients, stock agencies and publishers. Various film types, formats and print reproduction aspects will be explored in depth.

PHO 236 Product Photography

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: PHO 234 (Grade of C or higher)

Continues techniques from Large Format & Lighting (PHO 234), emphasizing studio product illustration using color transparency film and digital capture. Advanced techniques in lighting, further development of proficiency with the view camera, and advanced aspects of commercial illustration photography are included.

PHO 237 Advanced Lighting Technique

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ART 139 or concurrent enrollment, PHO 120 or concurrent enrollment

Emphasizes advanced lighting techniques for studio and location situations. Use of power pack, mono-block and small system strobe lighting will be emphasized. Controlling lighting conditions in mixed light situations for a variety of photographic fields including commercial, editorial, advertorial, portrait and events is covered.

PHO 253 Food Photography

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: PHO 236

Introduces students to the technical and aesthetic aspects of photographing food. Topics range from details and dinner settings, to splash photography. Course topics include advanced lighting techniques with natural light and studio strobe lighting and food and prop styling.

PHO 258 Wildlife Photography

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ART 138 (Grade of C or higher) or PHO 120 (Grade of B or higher)

This course introduces and refines specific tools and techniques involved in the taking of successful and professional wildlife photographs. This class exposes students to an awareness of the

outdoors, with a specific interest in wildlife through a lecture and various class field trips. Students are expected to have a good knowledge of basic photographic concepts, such as technical camera skills and creative composition before entering this class.

PHO 259 Extreme Adventure Photography

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ART 138 or PHO 120 (Grade of C or higher)
 Introduces students to tools and techniques that will allow them to capture exciting, high quality professional images of a variety of outdoor adventure activities in physically demanding environments. Students enrolling in this course should be physically prepared to engage in extreme adventures. Examples include rodeos, rappelling, mountain biking, kayaking and white-water rafting, rock crawling, or any other extreme activities. This course will take advantage of local events/competitions and outdoor activities during field trips.

PHO 260 Events & Wedding Photography

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ART 144, PHO 226
Note: Completion of PHO 232 suggested before taking PHO 260
 Presents skills for the intermediate/advanced photo student interested in learning the professional techniques associated with events (venue) and wedding photography. There will be an emphasis on advanced camera and flash techniques, candid, formal and ceremonial photography. Business and planning aspects will also be covered. Topics covered will include Weddings, Bar mitzvah/Bas mitzvah, Music Concerts, Sporting Events, Graduations and similar occasions. Students will gain hands-on knowledge and learn practical shooting skills.

PHO 263 Digital Capture Processing III

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: PHO 205, PHO 226
 This course will introduce advanced techniques in post-processing of digital captures. Various workflows for different photographic professions will be emphasized in this class. Image management with special software designed for the professional photographer is also included. Refinement of printing techniques and an introduction to theories of color management will also be covered.

PHO 266 Pro Digital Workflow: Software

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: PHO 226
 Concentrates on developing a seamless professional workflow for digital photography, integrating all aspects of digital photography, including shooting Camera RAW in the field, conversion of files to digital negatives, color calibration, importing, sorting and developing images, to final print output. Students will understand the workflow associated with importing, processing, managing, and showcasing large volumes of digital photographs. This includes the use of libraries for importing and managing photos, fundamental photographic adjustments and batch processing of photographs, and using additional tools to present photos onscreen, online, or in print.

PHO 268 Portfolio & Career Exploration

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: PHO 232 or PHO 236 (Grade of B or higher)
 Focuses on the creation of professional visual portfolio(s) and promotional pieces with techniques, styles, and formats appropriate for a photographic career.

PHO 269 Business of Photography

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: College Reading & Writing Literacy
 Creates a foundation for freelance work, business practices, procedures, and models unique to a career in photography.

Course topics include determining price structures, examining varying forms of photography based on students' career plans, equipment and studio needs, business forms, business planning, tax structure, licenses and registration, and self-promotion. The course may include visits by professionals in the field and discussion of career opportunities.

PHO 280 Internship

1 Credit Hour • 45 Contact Hours (Internship)
 Provides students with the opportunity to supplement course work with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor/coordinator.

PHO 281 Internship

1 Credit Hour • 45 Contact Hours (Internship)
 Provides students with the opportunity to supplement course work with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor/coordinator.

Physical Education Courses

PED 100 Fitness Concepts

1 Credit Hour • 30 Contact Hours (Physical Education)
 Focuses on providing information and guidelines for moving toward a more healthy lifestyle. Includes classroom instruction, an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program utilizing the equipment and exercise options available in the Fitness Center.

PED 102 Weight Training I

1 Credit Hour • 30 Contact Hours (Physical Education)
 Offers basic instruction and practice in weight training. Students utilize weight training equipment in accordance to their abilities and goals. Emphasizes weight training equipment orientation, correct lifting techniques, and basic program design for men and women.

PED 103 Weight Training II

2 Credit Hours • 60 Contact Hours (Physical Education)
 Offers guided instruction and independent practice in weight training for men and women. Students practice various weight training techniques in accordance with their abilities. Emphasizes physiological considerations, equipment orientation, correct lifting techniques, program design, and nutrition.

PED 110 Fitness Center Activity I

1 Credit Hour • 30 Contact Hours (Physical Education)
 Focuses on improving total fitness via an aerobic circuit training program. Includes an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. Covers the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition. Weight machines, stationary bicycles, and computerized cardiovascular equipment will be used to elicit improvements in fitness.

PED 111 Fitness Center Activity II

1 Credit Hour • 30 Contact Hours (Physical Education)
Prerequisite: PED 110
 Serves as an advanced course for individuals interested in reaching a higher level of total fitness via an aerobic circuit training program. Includes an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. Focuses on the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition will be addressed. Weight

machines, stationary bicycles, and computerized cardiovascular equipment will be used to elicit improvements in fitness.

PED 112 Fitness Center Activity III

1 Credit Hour • 30 Contact Hours (Physical Education)

Prerequisite: PED 111

Serves as an advanced exercise course designed for individuals interested in attaining a high level of total fitness. Includes an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. Focuses on the basic components of fitness including flexibility, muscular strength and endurance, cardiovascular fitness, and body composition. The primary mode of training will be Aerobic Circuit Training. The circuit training is supplemented with additional work on the specialized weight machines, dumbbells, treadmills, rowers, stair climbers, cross trainers, Nordic track, versa climbers, and running track available in the Fitness Center.

PED 113 Fitness Center Activity IV

1 Credit Hour • 30 Contact Hours (Physical Education)

Prerequisite: PED 112

Focuses on advanced instruction designed for individuals interested in attaining a high level of total fitness. Includes an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. Focuses on the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition. The primary mode of training will be Aerobic Circuit Training. The circuit training will be supplemented with additional work on the specialized weight machines, dumbbells, treadmills, rowers, stair climbers, cross trainers, Nordic track, versa climbers, and running track found in the Fitness Center.

PED 122 Step Aerobics

1 Credit Hour • 30 Contact Hours (Physical Education)

Introduces basic step aerobics, exercise techniques to improve physical fitness. Emphasizes the basic principles of step aerobics including the effects upon the cardio-respiratory system and skeletal muscles, various step patterns, and choreography.

PED 126 Cardio Kickboxing Aerobic I

1 Credit Hour • 30 Contact Hours (Physical Education)

Introduces aerobic kickboxing as an innovative new interval training aerobics workout that burns fat and increases cardiorespiratory endurance. This high intensity course will focus on basic kickboxing moves and technique through hi-low aerobics choreography and target striking. The course will also include floor work to focus on toning and flexibility.

PED 129 Zumba

1 Credit Hour • 30 Contact Hours (Physical Education)

Zumba is a compilation of high energy, motivating music with unique moves and choreography combinations. Zumba fuses Latin and International music and dance themes to create a dynamic, exciting, effective fitness system. The routines feature aerobic/fitness interval training with a combination of fast and slow rhythms that tone and sculpt the body. Zumba utilizes the principles of fitness interval training and resistance training to maximize caloric output, fat burning and total body toning. It is a mixture of body sculpting movements with easy to follow dance steps.

PED 140 Body Sculpting & Toning

1 Credit Hour • 30 Contact Hours (Physical Education)

Introduces exercise techniques to improve overall physical fitness. Emphasizes the interaction between cardiovascular conditioning, muscular strength and endurance, flexibility, and program design integrated into an aerobic format. Focuses on blending together different combinations and sequences of exercises while

conditioning the entire body. Students exercise using various types of resistance equipment.

PED 141 Pilates Matwork I

1 Credit Hour • 30 Contact Hours (Physical Education)

Focuses on Pilates matwork to increase core strength, overall muscles tone and flexibility with focused and precise floor work techniques. A physical education class built upon the philosophies and exercises of Josef Pilates.

PED 142 Pilates Matwork II

1 Credit Hour • 30 Contact Hours (Physical Education)

Prerequisite: PED 141

Builds upon the philosophies and exercises of Joseph Pilates. Pilates Matwork is a prerequisite, as this course builds upon basic techniques learned therein. Core strength, flexibility, overall muscle tone and balance are the goals of the matwork.

PED 143 Yoga I

1 Credit Hour • 30 Contact Hours (Physical Education)

Offers a guided instruction in yoga. Students practice yoga according to their individual fitness levels and abilities. Emphasizes enhancing general health and well-being through the performance of yoga strength, flexibility, balance, and relaxation techniques and exercises.

PED 144 Yoga II

1 Credit Hour • 30 Contact Hours (Physical Education)

Prerequisite: PED 143

Continues to build on the concepts of basic yoga. Increases awareness of yoga including physical and mental benefits.

PED 151 Walking & Jogging

1 Credit Hour • 30 Contact Hours (Physical Education)

Enables the student to understand the values in walking and jogging. Safety precautions and emphasis on personal programs are emphasized.

PED 161 Tai Chi I

1 Credit Hour • 30 Contact Hours (Physical Education)

Introduces Tai Chi as an expression of understanding of self-control, exercise, and self-defense. The primary emphasis is to gain an understanding of the history (origins and changes) of Tai Chi, the movements and their names, application of movements and terminology.

PED 162 Tai Chi II

1 Credit Hour • 30 Contact Hours (Physical Education)

Emphasizes the instruction of Tai-Chi from a practical and scientific approach with illustrations of applications for each of the movements in daily life. Cardiovascular training, strength and flexibility training, balance and coordination are integral parts of the Tai-Chi training. In addition, psychosocial skills such as meditation, relaxation, and self-efficacy will be addressed.

PED 163 Martial Arts I

1 Credit Hour • 30 Contact Hours (Physical Education)

Introduces basic martial arts techniques and forms designed to improve the physical and mental capacity of an individual. Enables the student to gain an understanding of the basic philosophies and concepts around the martial arts and the approach to ethics. Provides a clear-cut guide for developing a powerful sense of character and will.

PED 164 Martial Arts II

1 Credit Hour • 30 Contact Hours (Physical Education)

Prerequisite: PED 163

Presents an empty-hand form of self-defense using all parts of the body in various blocking, kicking, punching, and striking techniques against one or more assailants. The style of Karate taught will be Tae Kwon Do. Based on the results of an initial skills

test, each student will be assigned two additional kicks, one additional jump kick, and one pattern. Intermediate sparring and self-defense techniques will be taught. Each student will be assigned a goal that they will strive to achieve by the end of the course.

PED 230 Volleyball I

1 Credit Hour • 30 Contact Hours (Physical Education)
Introduces and improve student skill level in volleyball. The primary emphasis is on teaching the student the elements of volleyball including rules, offensive and defensive play, passing, serving, setting, attacking, team play and game strategies.

PED 231 Volleyball II

1 Credit Hour • 30 Contact Hours (Physical Education)
Prerequisite: PED 230
Introduces and improves students advanced skills in volleyball. The primary emphasis is on teaching students' quick offensives and advanced defensive systems in order to play volleyball at a competitive level.

Physical Therapy Assistant Courses

PTA 110 Basic Patient Care in Physical Therapy

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: Admission to the Physical Therapy Assistant Program or Department Chair approval
Examines the basic patient care skills for the healthcare practitioner. Enables the student to gain an understanding and demonstrate skills that include positioning, body mechanics, transfers, range of motion, palpation, vital signs, aseptic techniques, bandaging, intermittent venous compression, medical terminology, activities of daily living, wheelchair management, architectural barriers, and gait training.

PTA 115 Principles & Practices of Physical Therapy

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: College Reading & Writing Literacy
Explores the history of the profession including definition, development, and areas of practice. The role of the APTA, the physical therapist assistant and the relationship between the physical therapist, PTA and other health care professionals are investigated. Includes current issues and trends including professionalism, ethics, quality assurance, communications, and reimbursement issues such as Medicare, Medicaid, Worker's Compensation, and commercial insurance.

PTA 120 Modalities in Physical Therapy

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: PTA 110
Examines the theory and principles of physical therapy modalities. Course includes therapeutic heat and cold, traction, massage and hydrotherapy.

PTA 124 Rehab Principles of Medical I

2 Credit Hours • 30 Contact Hours (Lecture)
Prerequisite: College Reading & Writing Literacy
Investigates the impairments, functional limitations, and disabilities resulting from a variety of neuromusculoskeletal conditions. The medical management including pharmacology, and its impact on physical therapy rehab principles are discussed. Evidence based practice for musculoskeletal and neurological system diagnosis, will be reviewed as they relate to physical therapy rehab.

PTA 131 Professional Communications I

1 Credit Hour • 15 Contact Hours (Lecture)
Prerequisite: Permission of the Physical Therapy Assistant Chair
Introduces students to oral and written professional communication in their field. Develops skills in verbal and non-verbal communication, conducting self-critiques and peer reviews, research of professional literature, medical documentation, and professional presentations.

PTA 134 Rehab Principles of Medical II

2 Credit Hours • 30 Contact Hours (Lecture)
Prerequisite: College Reading & Writing Literacy
Investigates the impairments, functional limitations, disabilities, and medical management including pharmacology, of a variety of traumatic, immunological, inflammatory, and degenerative processes and their impact on physical therapy rehab principles. Evidence based practice for cardiovascular, respiratory, endocrine, and chronic pain diagnosis, will be reviewed as they relate to physical therapy rehab.

PTA 135 Principles of Electrical Stimulation

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: College Reading & Writing Literacy
Investigates the principles and application of electrical stimulation (ES) modalities currently used in physical therapy practice. Enables the student to understand the electrochemical and physiological effects of electrical stimulation and identify the various forms and applications of ES.

PTA 140 Clinical Kinesiology

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: HPR 117 or Department Chair approval
Focuses on the science of human motion, theories of biomechanics and muscle/joint structure and function. Emphasizes basic principles of therapeutic exercise and their application to specific body regions. A laboratory experience that includes the application of kinesiology and exercise principles is integrated in the learning experience.

PTA 141 Professional Communications II

1 Credit Hour • 15 Contact Hours (Lecture)
Prerequisite: Acceptance in the Physical Therapy Assistant program
Builds on Professional Communications I and develops skills in writing professional documents to patients and other health care professionals, participating effectively in meetings, and medical documentation skills.

PTA 205 Psychosocial Issues in Health Care

2 Credit Hours • 30 Contact Hours (Lecture)
Prerequisite: College Reading & Writing Literacy
Explores the psychosocial aspects of the patient/client and health care practitioner. Investigates recognition of and adjustment for psychological, sociological, educational, cultural, economic, and political concerns on the delivery of health care services. Communication skills and social and advocacy responsibilities of the health care practitioner are discussed. Enables the student to develop the skills to meet expectations and needs of members of society receiving health care services.

PTA 230 Orthopedic Assessment & Management Techniques

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: PTA 120, PTA 140
Examines the theory and principles and practices of orthopedic conditions. Includes an understanding of assessment and management techniques pertaining to orthopedic conditions, goniometry, manual muscle testing, gait analysis, and posture analysis.

PTA 240 Neurologic Assessment & Management Techniques

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: PTA 120, PTA 140

Examines the theory and principles of physical therapy with an introduction to assessment, management techniques and advanced physical therapy procedures as they relate to neurologic, cardiac and pulmonary conditions.

PTA 251 Professional Communications III

1 Credit Hour • 15 Contact Hours (Lecture)

Prerequisite: Acceptance in the Physical Therapy Assistant program

Promotes the concepts from Professional Communications II and further develops written and oral communication skills in the professional arena through correct documentation of patient progress based on observations, dictating progress notes, development of resume, job interview skills, portfolios, and an awareness of the national PTA exam.

PTA 278 PTA Seminar

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: PTA 230, PTA 280**Note: Students should be in the final semester of their degree*

Provides a summary of all coursework, internships and prepares the student for transition into the workforce as an entry level PTA. It includes a comprehensive review and mock exam in preparation for the national PTA exam, employment benefits, licensing, state practice act review, professional development, employment opportunities and community service.

PTA 280 Internship I

4 Credit Hours • 180 Contact Hours (Internship)

Prerequisite: PTA 120

Focuses on an initial clinical exposure providing hands on patient practicum skills and techniques. Includes application of basic patient care skills including transfers, range of motion, modalities, bandaging, aseptic techniques, and gait training. Students demonstrate professional behavior and communication principles appropriate in the physical therapy setting. A designated clinical instructor in an acute care, geriatric, or outpatient setting provides supervision.

PTA 281 PTA Internship II

5 Credit Hours • 225 Contact Hours (Internship)

Prerequisite: Successful completion of all PTA curriculum or permission of the program chair

Focuses on an intermediate clinical experience providing hands on patient practicum skills and techniques. Includes continued application of physical therapy procedures of Internship I with the addition of therapeutic exercise, goniometry, manual muscle testing, and motor learning techniques. Students demonstrate professional behavior and communication principles appropriate in the physical therapy setting. A designated clinical instructor in an acute care, rehabilitation, outpatient, geriatric, or home health setting provides supervision. During the internship, the student presents an in-service on a physical therapy related topic.

PTA 282 PTA Internship III

5 Credit Hours • 225 Contact Hours (Internship)

Prerequisite: Successful completion of all previous PTA curriculum or permission of the program chair

Incorporates advanced clinical experience providing hands on patient practicum skills and techniques. Students refine all physical therapy skills in preparation to enter the field as an entry-level physical therapist assistant. This final experience includes independent practice with an assigned caseload under the on-site

supervision of a clinical instructor. The student presents an in-service on a physical therapy related topic.

Physics Courses**PHY 105 Conceptual Physics with Lab: SC1**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Reading & Writing Literacy, College Quantitative Literacy

Focuses on mechanics, heat, properties of matter, electricity and magnetism, and light. Incorporates laboratory experience.

PHY 111 Physics: Algebra-Based I with Lab: SC1

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

Prerequisite: MAT 121

Covers the physics of mechanics and requires application of classical physics to both mathematical and conceptual problems. Major topics include kinematics in one and two dimensions, Newton's Laws, circular motion, work and energy, impulse and momentum, and rotational mechanics. This course may also include topics relating to simple harmonic motion and traveling and standing waves.

PHY 112 Physics: Algebra-Based II with Lab: SC1

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

Prerequisite: PHY 111

Covers the physics of electricity and magnetism and requires application of classical physics to both mathematical and conceptual problems. DC circuits involving resistors, capacitors, and batteries will be covered. Also covered are electromagnetic waves and geometric optics. This course may also include topics relating to simple harmonic motion, traveling and standing waves, and AC circuits.

PHY 211 Physics: Calculus-Based I with Lab: SC1

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

Prerequisite: MAT 201

Covers the physics of kinematics, dynamics, and conservation laws and requires application of classical physics to both mathematical and conceptual problems. Specific concepts covered include 1D and 2D kinematics, Newton's Laws, rotational motion, energy and work, momentum and impulse, and simple harmonic motion. This course may also cover thermodynamics and fluid mechanics.

PHY 212 Physics: Calculus-Based II with Lab: SC1

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

Prerequisite: PHY 211

Covers the physics of electricity and magnetism using conceptual and mathematical reasoning, including calculus. Maxwell's equations, waves, and time-varying circuits will be covered. Optional topics include wave and geometric optics and AC circuits.

PHY 213 Physics III: Calculus Based Modern Physics

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: PHY 212

Expands upon PHY 212 and explores twentieth century advances in physics. Topics may include special and general relativity, quantum theory, atomic physics, solid state physics, nuclear physics, semiconductor physics and cosmology.

Plumbing Courses**PLU 207 International Plumbing Code**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Helps those plumbers working in jurisdictions where the International Plumbing Code has been adopted. This course will review the IPC and help the plumber apply the requirements of this code to the installation of plumbing systems.

PLU 208 International Fuel Gas Code

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: PLU 207

Reviews the general requirements of applicable chapters of the IFGC. Students are given the opportunity to learn system sizing which includes fuel gas piping, gas appliance venting, and combustion air.

PLU 250 Plumbing Estimating and Costing

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Reviews the information required to estimate and cost the installation of plumbing and fixtures. Topics include labor, material take-off, overhead costs and operating a profitable plumbing business.

Political Science Courses**POS 105 Introduction to Political Science: SS1**

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Focuses on a survey of the discipline of political science, including political philosophy and ideology, democratic and non-democratic governments and processes, and international relations.

POS 111 American Government: SS1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Includes the background of the U.S. Constitution; the philosophy of American government; general principles of the Constitution; federalism; and civil liberties. Examines public opinion and citizen participation; political parties, interest groups, and the electoral process; and the structure and functions of the national government.

POS 125 American State & Local Government: SS1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines the structure and function of state, county, and municipal governments including their relations with each other and with national government. Includes a study of Colorado government and politics.

POS 136 American Presidency

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the office of the president as a branch of government. Examines the individuals who have occupied and shaped the presidency, and changes in the office itself.

POS 205 International Relations: SS1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines the interactions among various levels of actors in the international system. This course attempts to explain behaviors across state boundaries.

POS 215 Current Political Issues: SS1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Incorporates an in-depth analysis of the background and nature of political issues and themes.

POS 225 Comparative Government: SS1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines domestic political systems, developments, themes, and events across countries and regions while applying the comparative method to identify similarities and differences.

POS 280 Internship

1-6 Credit Hours • Per Credit Hour, 45 Contact Hours (Internship)

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

Psychology Courses**PSY 100 Psychology of Workplace Relationships**

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Focuses on interactions among people including their conflicts, cooperative efforts, and group relationships. This course examines why beliefs, attitudes, and behaviors cause relationship problems in our personal lives and in work-related situations. Additionally, this course emphasizes the analysis of human behavior, the application of prevention strategies, and resolution of the behavior.

PSY 101 General Psychology I: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning, and memory.

PSY 102 General Psychology II: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, life span development, sex, gender, sexuality and social psychology.

PSY 112 Psychology of Adjustment

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Emphasizes personal growth and the development of interpersonal skills. Focuses on the practical application of psychological principles and theories in achieving self-understanding and personal growth.

PSY 205 Psychology of Gender: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 (Grade of C or higher) and PSY 101 (Grade of C or higher) or PSY 102 (Grade of C or higher)

Examines gender comparisons in work, courtship, family life, and sexual behavior throughout the life span.

PSY 217 Human Sexuality: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 (Grade of C or higher) and PSY 101 (Grade of C or higher) or PSY 102 (Grade of C or higher)

Surveys physiological, psychological, and psychosocial aspects of human sexuality. Topics include relationships, sexual identity, and sexual health.

PSY 226 Social Psychology: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 (Grade of C or higher) and PSY 101 (Grade of C or higher) or PSY 102 (Grade of C or higher)

Focuses on the behavior of humans in a wide variety of social settings and the social influences humans have on each other in those settings.

PSY 227 The Psychology of Death & Dying: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 (Grade of C or higher) and PSY 101 (Grade of C or higher) or PSY 102 (Grade of C or higher)

Examines human development from conception through death, emphasizing physical, cognitive, emotional, and psychosocial factors.

PSY 235 Human Growth & Development: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 (Grade of C or higher) and PSY 101 (Grade of C or higher) or PSY 102 (Grade of C or higher)

Examines human development from conception through death, emphasizing physical, cognitive, emotional, and psychosocial factors.

PSY 238 Child Development: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 (Grade of C or higher) and PSY 101 (Grade of C or higher) or PSY 102 (Grade of C or higher)

Focuses on the growth and development of the individual, from conception through childhood, emphasizing physical, cognitive, emotional, and psychosocial factors.

PSY 247 Child Abuse & Neglect

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 (Grade of C or higher) and PSY 101 (Grade of C or higher) or PSY 102 (Grade of C or higher)

Examines the causes and effects of physical, sexual, and psychological abuse and neglect. This course emphasizes intervention and prevention strategies.

PSY 249 Abnormal Psychology: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 (Grade of C or higher) and PSY 101 (Grade of C or higher) or PSY 102 (Grade of C or higher)

Examines abnormal behavior and its classification, causes, treatment, and prevention.

PSY 255 Brain and Behavior

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 (Grade C or higher) and PSY 101 (Grade C or higher) or PSY 102 (Grade C or higher)

Introduces the study of the relationship between brain and behavior. Modern research methods and ethics in the study of brain and behavior are examined. This course applies neuroanatomy and neurophysiology, related to human experience and behavior, are also considered. Applies neuroscience concepts to understand and intervene in human behaviors and psychological disorders.

PSY 265 Psychology of Personality: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 121 (Grade of C or higher) and PSY 101 (Grade of C or higher) or PSY 102 (Grade of C or higher)

Examines the structure, function and development of personality. Investigates the major contemporary theories of personality. Covers psychodynamic, behavioral, cognitive-social learning, humanistic, trait, and, optionally, neurobiological, existential, and/or Eastern perspectives. The underlying assumptions and research support for these theories are appraised. Enables the student to gain an appreciation of the value of alternative theoretical approaches to this subfield study of psychology.

Public Security Management Courses**PSM 130 Homeland Security Law**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides a comprehensive overview for business, industry, and government as well as those faced with the new legal and security issues raised by new public laws, the new regulatory framework, and a new Department of Homeland Security. A complete overview of homeland security laws and regulations; emerging public safety requirements and policies; current and evolving programs to protect water, food and air supplies; latest security challenges in air transportation, vessel and port operations, and chemical handling and storage; privacy rights-finding the right balance with security concerns; human resource issues-hiring, firing, monitoring, providing a safe workplace, and Department of Homeland Security: organizational structure and management priorities; developing the most effective and compliant security plans.

PSM 132 Homeland Defense: Forecasting Terrorism

3 Credit Hours • 45 Contact Hours (Lecture)

Examines the variety of new indicators, warning methodologies, and analytical tools available to analysts; review of the extensive academic, governmental, and policy literature on terrorism forecasting that has been developed to assess and forecast terrorism in its numerous dimensions. Students will comprehend the various analytical capabilities of the types of terrorist threats that are most likely to confront the USA and its allies in the near future, and predict how to develop proactive defenses for the long term protection of our society.

PSM 133 Homeland Security: Chemical & Biological Defense

3 Credit Hours • 45 Contact Hours (Lecture)

Provides an overview of the radiological, chemical, biochemical, and biological threat to Homeland Security. Analysis of the agents and means of dissemination or attack that an adversary nation, group or terrorist cell may employ to deliver these agents; review the current and projected means, techniques, and procedures for defense against such agents; review of theory and practices in chemical and biological threats to develop proactive defensive postures to defeat these threats.

PSM 135 Critical Infrastructure Protection

1 Credit Hour • 15 Contact Hours (Lecture)

Explores the facets of Critical Infrastructure protection. Provides the student with an interactive forum to develop protection strategies.

PSM 136 Hospital Emergency Response Training (HERT) for Weapons of Mass Destruction (WMD)

3 Credit Hours • 45 Contact Hours (Lecture)

Provides Hospital Emergency Response Training (HERT) for Weapons of Mass Destruction (WMD). This course is designed to provide guidance to hospitals, EMS, health care facilities and citizens who may become involved in a mass casualty incident as a result of a hazardous materials incident (HMI) or weapons of mass destruction (WMD) event. The HERT/WMD introduces the hospital incident management system (HIMS), addresses chemical protective clothing and equipment (CPC&E) requirements, and presents guidance for hospital emergency response team (HERT) design, development and training. This course prepares HERT to conduct safe and effective emergency response during mass casualty incidents (MCI).

PSM 137 Introduction to Mitigation

3 Credit Hours • 45 Contact Hours (Lecture)

Provides students with information and skills necessary to sustain actions to reduce or eliminate long-term risk to people and property from hazards and their effects.

PSM 200 National Incident Management System/Interagency Operations

3 Credit Hours • 45 Contact Hours (Lecture)

Explores several components that work together as a system to provide a national framework for preparing for, preventing, responding to, and recovering from domestic incidents. These components include command and management, preparedness, resource management, communications and information management, supporting technologies, and ongoing management and maintenance.

Radio & Television Courses**RTV 100 Introduction to Electronic Media**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the study of the market demands involving national, local and international uses of electronic media.

RTV 101 Radio Programming & Production I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Focuses on radio programming, formats and audience rating surveys, basic and sophisticated communications systems, history of broadcasting, broadcasting and production equipment, and program broadcast systems and propaganda.

RTV 102 Beginning Television

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Focuses on principles and techniques of television production in theory and the approach of studio and field production. Emphasizes producing television programs, beginning with a concept through script to actual studio production, preproduction, and post production.

RTV 103 Writing for Television & Radio

3 Credit Hours • 45 Contact Hours (Lecture)

Explores writing techniques for television and radio emphasizing professional techniques, format, and style.

RTV 104 Corporate Scriptwriting

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on scriptwriting formats and techniques as they apply to creating corporate and institutional video productions and other broadcast and non-broadcast television productions.

RTV 108 Principles of Audio

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Focuses on basic audio production techniques to be used in television production. Includes the use of basic audio equipment and mixer to produce audio tracks for radio and television production.

RTV 120 News & Sports Writing & Reporting

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Introduces students to the world of News and Sports writing, reporting, and production. Emphasizes gathering, writing, and reporting radio and television news and sports. Covers history, current trends, ethical issues, news and sports in print, radio, TV, and the Internet and the production of finished projects in both the mediums of TV and Radio.

RTV 180 Internship – KEPC Radio

4 Credit Hours • 180 Contact Hours (Internship)

Prerequisite: RTV 101 or RTV 102

Incorporates on-the-air experience on the college FM radio station, KEPC.

RTV 181 Internship – College ITV Studio

4 Credit Hours • 180 Contact Hours (Internship)

Prerequisite: RTV 102, RTV 208

Provides experience in a commercial television station or an allied industry.

RTV 182 Internship – Radio Station/Audio Production Company

4 Credit Hours • 180 Contact Hours (Internship)

*Prerequisite: RTV 101**Note: Must have faculty consent to enroll*

Provides experience in a commercial radio station or an allied industry.

RTV 183 Internship – Television Studio/Video Production Company

4 Credit Hours • 180 Contact Hours (Internship)

*Prerequisite: RTV 102**Note: Must have faculty consent to enroll*

Provides experience in a commercial television station or an allied industry.

RTV 208 Basic Video Production

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: RTV 102

Introduces basic videotape production and editing on linear and non-linear editing systems. Covers producing, writing, directing, lighting, editing, and shooting techniques. Enables the student to gain experience in paint and character generator graphics, image processing, transitions, and techniques using the Avio and Casablanca non-linear editors.

RTV 210 Audio Mixing

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Includes the fundamentals of audio mixing from the audio source to final master. By explaining the principles of mixing and the technical foundations of audio recording. Analyzing the principles of acquiring, manipulating, recording, and final mixing of audio and discussing the differences between digital and analog recording. Each student will summarize the function of microphones, audio sources, recording devices, and speakers and complete recording exercises and projects according to provided guidelines. Demonstration of linear and non-linear master mixing will also be required.

RTV 211 Radio Programming & Production II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: RTV 101

Focuses on styles of writing and reporting news, editorials, interviews, and commentaries; station logs and announcing styles and techniques; the Federal Communications Commission with emphasis on politics and serving the public interest; job finding and advancing in broadcasting; women in broadcasting; drama; and specialized production. Includes sports casting and weather casting.

RTV 212 Advanced Television Production

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: RTV 102

Introduces additional principles and techniques of television production in theory and the approach of studio and production in news, weather, and sports. Emphasizes direction and production development to include single and multi-camera production. Examines use of effects and chroming. Includes laws and ethics governing the television broadcast industry and Institutional Television.

RTV 218 Advanced Video Production

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: RTV 208

Develops advanced video production skills to prepare students for entry into the video production industry. Covers producing, directing, lighting, shooting, and editing techniques, as well as production aesthetics from industry standards. Provides hands on experience with linear and non-linear editing systems, and establishment of lighting and camera shooting techniques.

RTV 260 Broadcast Management

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the field of broadcast management as applied to day-to-day radio and television station operations, broadcast law, broadcast promotion, sales, research, ratings, logs, demographics and human relations in the broadcast workplace and arena.

RTV 280 Internship – TV Studio/Video Production II

3 Credit Hours • 135 Contact Hours (Internship)

Prerequisite: RTV 102, RTV 181 or RTV 183

Provides experience in a commercial television station or an allied industry.

RTV 281 Internship in the News – KEPC Radio

3 Credit Hours • 135 Contact Hours (Internship)

Prerequisite: RTV 101

Enables the student to cover news events, actualities, and report several regular newscasts on KEPC.

RTV 282 Internship – KEPC Radio II

3 Credit Hours • 135 Contact Hours (Internship)

Prerequisite: RTV 101, RTV 180 or RTV 182

Incorporates advanced experience on radio station KEPC.

RTV 283 Internship – Radio Station/Audio Production II

3 Credit Hours • 135 Contact Hours (Internship)

Prerequisite: RTV 102, RTV 180 or RTV 282

Incorporates advanced experience in a commercial radio station or an allied industry.

RTV 284 Internship in Telecommunications

3 Credit Hours • 135 Contact Hours (Internship)

Prerequisite: RTV 101 or RTV 102, RTV 180 or RTV 182 or RTV 183

Provides experience in a commercial TV station or an allied industry.

Radiologic Technology Courses

RTE 101 Introduction to Radiography

2 Credit Hours • 30 Contact Hours (Lecture)

Introduces radiology including equipment, exposure, positioning and the knowledge necessary for the radiography student to provide safe patient care including communication skills, body mechanics, patient transfer, and radiography as a profession.

RTE 111 Radiographic Patient Care

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Introduces the fundamentals of human diversity; and legal and ethical considerations. Includes lecture and laboratory experience in patient care, standard and transmission-based precautions, asepsis versus non-asepsis, vital signs, venipuncture, medical emergencies, drug administration, patients with specific needs and end-of-life interactions.

RTE 121 Radiographic Procedures I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Introduces the fundamentals of radiographic equipment to safely obtain radiographs, apply radiation safety techniques, and identify related positioning terminology. This course emphasizes identification of anatomy, common pathology, and radiographic terminology of the upper extremities, chest, and abdomen.

RTE 122 Radiographic Procedures II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Reinforces the fundamentals of radiographic positioning of the extremities. This course introduces anatomy, pathology, and skills necessary to perform radiographic procedures of the spine, bony thorax, and abdominopelvic region.

RTE 141 Radiographic Equipment & Imaging I

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the fundamental aspects of radiographic equipment including the basic concepts pertaining to x-ray production, x-ray equipment, and photon interactions with matter.

RTE 142 Radiographic Equipment & Imaging II

3 Credit Hours • 45 Contact Hours (Lecture)

Provides in-depth knowledge of scatter control, radiographic exposure technique, image acquisition, process, and fluoroscopy. Includes criteria and factors that affect image quality, quality assurance and healthcare informatics.

RTE 181 Radiographic Internship I

5 Credit Hours • 225 Contact Hours (Internship)

Introduces the clinical education experience at the healthcare facility. The course focuses on the application of knowledge to the actual practice of radiography.

RTE 182 Radiographic Internship II

5 Credit Hours • 225 Contact Hours (Internship)

Builds upon prior clinical internship experience to advance student proficiency in the practice of radiography in the healthcare facility. The course focuses on the application of knowledge to the actual practice of radiography.

RTE 183 Radiographic Internship III

7 Credit Hours • 315 Contact Hours (Internship)

Reinforces and builds independence in the clinical internship experience. Applies radiographic knowledge learned in the classroom and prior clinical internship experience.

RTE 221 Advanced Medical Imaging

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Offers advanced imaging techniques including radiographic procedures involving the skull, trauma, mobile, surgical, pediatric, special procedures and advanced modalities.

RTE 231 Radiation Biology/Protection

2 Credit Hours • 30 Contact Hours (Lecture)

Provides the basic knowledge and understanding of the biologic effects of ionizing radiation and radiation protection and safety.

RTE 281 Radiographic Internship IV

8 Credit Hours • 360 Contact Hours (Internship)

Introduces the student to the radiographic specialty areas of Pediatrics, Geriatrics, the out-patient clinic, as well as increasing proficiency in general radiography.

RTE 282 Radiographic Internship V

8 Credit Hours • 360 Contact Hours (Internship)

Introduces the student to the radiographic specialty areas of pediatrics, geriatrics, the out-patient clinic, portable and trauma radiography as well as increasing proficiency in general radiography.

RTE 289 Capstone

3 Credit Hours • 45 Contact Hours (Lecture)

Prepares the radiology technology student to effectively search for a job in radiography and sit for the American Registry of Radiologic Technology examination.

Recreation Courses

REC 100 Introduction to Recreation

2 Credit Hours • 30 Contact Hours (Lecture)
Studies the history, principles, philosophy, and contemporary problems and trends of recreation and their influence upon today's American society.

REC 210 Principles of Outdoor Recreation

3 Credit Hours • 52.5 Contact Hours (30 Lecture, 22.5 Lecture/Lab Combination)
Includes lecture and practical outdoor experience relating to problems and trends in outdoor recreation.

REC 211 Outdoor Leadership

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: REC 100 (Grade of C or higher)
Introduces the development, acquisition, and application of outdoor leadership skills and knowledge. Focuses on the latest information philosophy, and techniques necessary to safely conduct outdoor programs and expeditions as an outdoor leader. Skills are applied under actual field conditions. Emphasizes minimal impact camping, wilderness ecology, judgment and decision making, group dynamics and trip logistics. These skills enhance effectiveness as an outdoor leader.

REC 212 Outdoor Recreation Programming

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: REC 100
Provides effective planning, staffing, and budgeting for the outdoor experience for the maximum opportunity for a successful program. Issues of marketing and promotion, agency coordination, risk management, environmental impact, logistics and the customer needs and expectations are addressed.

Respiratory Care Courses

RCA 105 Introduction to Respiratory Care

1 Credit Hour • 15 Contact Hours (Lecture)
Prerequisite: BIO 201, MAT 107
Introduces the principles and practices of Respiratory Therapy, to include the study of: the profession's history, current and future roles of the respiratory therapist, working cohesively with other professional organizations, quality care and evidence-based practice, patient safety, effective communication with patients, patient health records, principles of infection control, and implications of legal and ethical practices.

RCA 131 Basic Techniques in Respiratory Care

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: Program admission
Introduces the principles and practices of Respiratory Therapy; to include the study and application of infection control, conducting a patient centered interview, performing a cardiopulmonary physical assessment, identifying normal and abnormal structures on a thoracic radiograph, and the application of medical gases to the cardiopulmonary patient.

RCA 132 Basic Techniques in Respiratory Care II

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: RCA 131
Introduces the principles and practices of respiratory therapy, to include the study and application of aerosol therapy for medication delivery, airway clearance, and lung expansion techniques to promote bronchial hygiene for patients with cardiopulmonary disease pathologies.

RCA 151 Cardiopulmonary Anatomy & Physiology

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: Program admission
Examines the cardiopulmonary anatomy and physiology related to respiratory therapy. This course also includes the study and analysis of the functional interrelationships between the pulmonary and cardiovascular systems.

RCA 153 Cardiopulmonary Disease & Pathology

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: Program admission, RCA 131, RCA 151
Covers the pathological abnormalities and clinical manifestations associated with cardiopulmonary diseases. This course includes the study of patient assessment, treatment modalities, and management for both chronic and acute cardiopulmonary diseases.

RCA 156 Application of Science in Respiratory Care

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: Program admission
Applying the basic concepts of chemistry and physics in relation to the practices of Respiratory Therapy. Interpretation of laboratory data collected from an arterial and/or venous blood sample for identifying a patient's homeostasis with oxygenation and ventilation to maintain a normal acid-base balance. Applying an index of O₂ calculation to determine how gases are exchanged and transported from the atmosphere to the body for the assessment of the cardiopulmonary patient.

RCA 164 Advanced Cardiac Care

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: RCA 151
Focuses on an in-depth process of the electrophysiology of the heart, as well as the techniques and interpretations of electrocardiograms. The class will also include instruction and certification in ACLS.

RCA 165 Pharmacology of Cardiopulmonary Care

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: Program admission, RCA 151
Focuses on a study of the principles of pharmacology and the pharmacologic properties and application of drugs commonly employed in the treatment of cardiopulmonary disease.

RCA 230 Critical Care I

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: RCA 153
Focuses on the care of critically ill patients. Includes advanced pulmonary physiology and pathophysiology, assessment and monitoring of acute and chronic respiratory failure, mechanical ventilation, and emergency respiratory care. Incorporates a laboratory portion that enables the student to develop skills essential for the assessment and treatment of the critically ill.

RCA 251 Critical Care II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: Program admission, RCA 230
Focuses on selected topic areas as in critical care. Includes both technical and management concerns in the intensive care setting.

RCA 254 Pulmonary Function Testing

1 Credit Hour • 15 Contact Hours (Lecture)
Prerequisite: Program admission, RCA 151, RCA 165
Explores the Indications for Pulmonary Function Testing as well as the testing procedures involved in pulmonary function testing. This will include Spirometry, Lung Volumes and Gas Distribution Tests. Reference values as well as conversion and correction factors will be introduced. This class will also explore how Pulmonary Function testing is used to diagnose disease and evaluate treatment.

RCA 256 Pediatric & Neonatal Care

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: Program admission, RCA 151, RCA 153, RCA 164, RCA 165

Covers aspects of fetal development, neonatology, and pediatrics. Cardiopulmonary disorders, respiratory therapeutics, special procedures, labor and delivery will be covered. Students enrolled in this class will also be certified in Pediatric Advanced Life Support.

RCA 265 Professional Development

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: RCA 283

Reviews the respiratory therapy concepts, theory, and therapeutic applications covered within the program curriculum to prepare for the national credential examination, job placement, and state licensure requirements.

RCA 280 Internship I

4 Credit Hours • 180 Contact Hours (Internship)

Prerequisite: RCA 131, RCA 132

Focuses on the care and analysis of the noncritical patient. Procedures include those presented in RCA 131 and RCA 132.

RCA 281 Internship II

8 Credit Hours • 360 Contact Hours (Internship)

Prerequisite: RCA 280

Focuses on the care and analysis of the critically ill patient. Rotations into specialty areas are carried out as the schedule permits.

RCA 283 Internship III

7 Credit Hours • 315 Contact Hours (Internship)

Prerequisite: RCA 281

Continues to address the care and analysis of the critically ill patient and specialty rotations. Attempts to more closely evaluate the student's ability to manifest critical judgments in solving clinical problems and understanding professional/departmental activities.

Russian Courses**RUS 111 Russian Language I**

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the Russian language.

RUS 112 Russian Language II

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: RUS 111 (Grade of C or higher)

Continues Russian I in the development of functional proficiency in listening, speaking, reading, and writing the Russian language.

RUS 211 Russian Language III: AH4

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: RUS 112 (Grade of C or higher)

Continues Russian Language II in the development of increased functional proficiency at the intermediate level in speaking, aural comprehension, reading, writing, and cultural competency in the Russian language. This course is conducted predominantly in Russian.

RUS 212 Russian Language IV: AH4

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: RUS 211 (Grade of C or higher)

Continues Russian Language III in the development of increased functional proficiency at intermediate mid-level in speaking, aural comprehension, reading, writing, and cultural competency in the

Russian language. This course is conducted predominantly in Russian.

Science Courses**SCI 155 Integrated Science I-Physics & Chemistry with Lab: SC1**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Quantitative Literacy

Examines the nature of energy and matter, their interactions and changes, and the application of fundamental concepts to the study of our natural world. These concepts will be explored in hands-on laboratory experiments. This course integrates the fundamental concepts and ideas about the nature of physics and chemistry with the natural world.

SCI 156 Integrated Science II-Earth & Life Sciences with Lab: SC1

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Quantitative Literacy

Examines earth and biological systems, living and non-living environments, through the application of fundamental energy and matter concepts. These systems and concepts will be explored in hands-on laboratory experiments.

Social Work Courses**SWK 100 Introduction to Social Work**

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Note: This course transfers to CSU-Pueblo

Introduces students to the philosophy of the social work profession including the knowledge, values, ethics, roles and skills inherent to generalist social work.

SWK 105 Application of Group Counseling

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Covers the basic techniques, philosophies, and principles of problem solving through group counseling. It teaches group leaders how to apply techniques in working with a variety of client groups.

SWK 106 Introduction to Alcohol & Drugs

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Acquaints the beginning student with various issues related to the field of working with substance and alcohol abuse. This course will also introduce the student to the knowledge base, values, ethics, intervention skills, and the diverse population groups served by social workers.

SWK 180 Internship I

6 Credit Hours • 270 Contact Hours (Internship)

Prerequisite: SWK 222

Provides work experience in a business or industry.

SWK 181 Internship II

6 Credit Hours • 270 Contact Hours (Internship)

Prerequisite: SWK 222

Provides work experience in a business or industry.

SWK 201 Human Behavior in the Social Environment I

3 Credit Hours • 45 Contact Hours (Lecture)

Note: This course transfers to CSU-Pueblo

Focuses on the person in the environment throughout the life span with an examination of the relationship between biological, psychological, social, spiritual and cultural systems.

SWK 202 Human Behavior in the Social Environment II

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Reading & Writing Literacy**Note: This course transfers to CSU-Pueblo*

Focus in this course is on an understanding and analysis of larger social systems which include the family, groups, communities and organizations. Emphasis is on social systems as an organizing theoretical framework for understanding social functioning and change.

SWK 205 Social Welfare in the U.S.

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Reading & Writing Literacy**Note: This course transfers to CSU-Pueblo*

Introduces students to the profession of Social Work and Social Welfare. Students will be presented with an historical and conceptual overview of the social welfare system in the United States. Attention is given to the milieu within which social, political, economic, racial and cultural forces have interacted in the evolution of social welfare.

SWK 207 Differential Approaches in Social Services

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Introduces students to some contemporary counseling theories. Provides a basic understanding of treatment modalities to include Reality Therapy, Client Centered Therapy, and Behavior Modification.

SWK 208 Social Work Case Management

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Prepares students for work in the area of social services case management. Some of the topics that students will study include client assessment, resource identification, interventions with diverse client populations, counseling, NASW Code of Ethics, linkage, and outcome evaluation.

SWK 222 Introduction to Social Work Practice

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: SWK 100, SWK 205**Note: This course transfers to CSU-Pueblo*

Application of the foundation of generalist practice skills. Requires 15 clock hours of volunteer work in an approved human service agency.

SWK 280 Internship III

6 Credit Hours • 270 Contact Hours (Internship)

Prerequisite: SWK 181, SWK 222

Provides work experience in a business or industry.

Sociology Courses**SOC 101 Introduction to Sociology I: SS3**

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

This course examines the basic concepts, theories, and principles of sociology, including topics of culture, race, class, gender, sexuality, social groups, and deviance through a local and global lens. Analyzes and interprets socio-historic as well as contemporary issues by using critical thinking skills and linking individual experiences to social structures.

SOC 102 Introduction to Sociology II: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines the basic concepts, theories, and principles of sociology, including topics of family, religion, education, politics, the economy, health, demography, the environment and social movements through a local and global lens. Analyzes and

interprets socio-historical as well as contemporary issues by using critical thinking skills and linking individual experiences to social structures.

SOC 205 Sociology of Family Dynamics: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Offers a critical exploration of marriage, family and kinship. It examines the family as an institution and how social, cultural and personal factors influence family relations locally and globally. Explores the stability and evolution of the family, along with current trends and a range of family forms.

SOC 216 Sociology of Gender: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Examines major trends and theoretical approaches within the field of sociology of gender including the impact of intersecting social markers such as race, class, sexuality and gender identities. Addresses gender performance, stratification and inequalities in micro and macro settings in the U.S. Focuses on social movements relating to identities and institutional inequalities.

SOC 218 Sociology of Diversity: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Explores differences based on race, ethnicity, social class, gender, age, ability status, and sexual identity. Critically examines the dynamics of intergroup relations and how social construction of these differences can lead to patterns of prejudice, discrimination, and inequality nationally and globally.

SOC 220 Sociology of Religion: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Further explores the study of the sociology of religion. Analyzes the socially constructed definition of religion, the forms religion takes in various societies, the impact religion has on local and global societies and social institutions and the many ways in which people shape, maintain or disassemble religious structures.

SOC 231 The Sociology of Deviant Behavior: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Critically examines various deviant categories and societal reactions to deviance affecting diverse populations. Examines how sociologists study deviance and the theories they use to explain it. Explains the ways social institutions define deviance and attempt to control, change, or treat those deviant behaviors, attitudes, and conditions.

SOC 237 Sociology of Death & Dying: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Explores the socially constructed nature of how individuals and societies interact with death and dying. Examines how individuals experience death and dying based on their social location. Analyzes diversity in grief practices related to death.

Spanish Courses**SPA 101 Conversational Spanish I**

3 Credit Hours • 45 Contact Hours (Lecture)

Offers beginning students the skills necessary to understand and speak Spanish. The material includes basic vocabulary, grammar, and expressions that are used in daily situations and in travel.

SPA 102 Conversational Spanish II

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: SPA 101 (Grade of C or higher)

Offers students the skills necessary to understand and speak Spanish. The material continues to cover basic conversational patterns, expressions, and grammar.

SPA 109 Spanish for Travelers

2 Credit Hours • 30 Contact Hours (Lecture)

Introduces basic vocabulary and expressions useful to travelers in Spanish speaking countries. The course will concentrate on customs, traditions, and cultural distinctions to be discovered by a visitor to the destination country. Cultural diversity and global awareness are integral to this course of study.

SPA 111 Spanish Language I

5 Credit Hours • 75 Contact Hours (Lecture)

Develops students' interpretive, interpersonal, and presentational communicative abilities in the language. Integrates these skills in the cultural contexts in which the language is used. Offers a foundation in the analysis of culture.

SPA 112 Spanish Language II

5 Credit Hours • 75 Contact Hours (Lecture)

Expands students' interpretive, interpersonal, and presentational communicative abilities in the language across the disciplines. Integrates these skills with the study of the cultures in which the language is used. Offers a foundation in the analysis of culture and develops intercultural communicative strategies.

SPA 114 Fast-Track Spanish I & II

5 Credit Hours • 75 Contact Hours (Lecture)

Designed to bridge beginning SPA courses with intermediate SPA courses. It is designed for students who have studied two years of the target language in high school and possess linguistic and cultural knowledge that true beginners do not, but are not ready yet to move to the intermediate level because they need an in-depth review of essential structures.

SPA 115 Spanish for the Professional I

3 Credit Hours • 45 Contact Hours (Lecture)

Designed as an introduction to a working knowledge of the Spanish language, cultural behaviors, and values useful in various professional fields such as health care, law enforcement, bilingual education, business, and others.

SPA 201 Conversational Spanish III

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: SPA 102 (Grade of C or higher)

Provides students with the skills necessary to continue their study of understanding and speaking Spanish. The material includes intermediate level vocabulary, grammar, and expressions.

SPA 202 Conversational Spanish IV

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: SPA 201 (Grade of C or higher)

Provides students the skills necessary to continue their study of understanding and speaking Spanish. The material will continue to cover intermediate level conversational patterns, expressions, and grammar.

SPA 211 Spanish Language III: AH4

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: SPA 112 (Grade of C or higher)

Continues Spanish Language II in the development of increased functional proficiency at the intermediate level in speaking, aural comprehension, reading, writing, and cultural competency in the Spanish language. This course is conducted predominantly in Spanish.

SPA 212 Spanish Language IV: AH4

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: SPA 211 (Grade of C or higher)

Continues Spanish Language III in the development of increased functional proficiency at intermediate mid-level in speaking, aural comprehension, reading, writing, and cultural competency in the Spanish language. This course is conducted predominantly in Spanish.

SPA 215 Spanish for the Professional II

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: SPA 115 (Grade of C or higher) or concurrent enrollment

Continues SPA 115 in the development of a working knowledge of the Spanish language, cultural behaviors, and values useful in various professional fields such as health care, law enforcement, bilingual education, business, and others.

SPA 261 Grammar for the Heritage Language Speaker

3 Credit Hours • 45 Contact Hours (Lecture)

Note: Permission of Instructor required

Provides formal grammatical instruction to Foreign Language students whether native or bilingual who want to develop their existing proficiency in Spanish.

SPA 262 Composition for the Heritage Language Speaker

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: SPA 212 (Grade of C or higher)

Provides formal composing instruction to Spanish Language students whether native or bilingual who want to develop their existing proficiency in Spanish.

SPA 289 Capstone

3 Credit Hours • 45 Contact Hours (Lecture)

Provides a demonstrated culmination of learning within a given program of study.

Surgical Technology Courses**STE 100 Fundamentals of Surgical Technology**

6 Credit Hours • 90 Contact Hours (Lecture)

*Prerequisite: BIO 201, BIO 204, ENG 121 or ENG 131, HPR 208, MAT 103 or higher**Note: Recommended Preparation: BIO 202 and PSY 235**Note: Instructor Signature Required*

Introduces the fundamental principles and practices of surgical technology, including an orientation to the profession and a review of legal and ethical issues. Topics about patient needs, special patient populations, the physical environment, and safety issues related to the surgical setting and biomedical sciences will also be discussed.

STE 101 Surgical Technology Skills Lab

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: STE 100 or concurrent enrollment**Note: Instructor Signature Required*

Introduces hands-on skills in a mock operating room environment. This training will include the pre-operative, intra-operative and post-operative phases of surgery.

STE 105 Pharmacology of Surgical Technologist

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: STE 100 or concurrent enrollment**Note: Instructor Signature Required*

This course discusses relevant knowledge as it pertains to surgical pharmacology theory, drugs, and aspects of anesthesia.

STE 110 Surgical Procedures I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: STE 100 or concurrent enrollment, STE 101 or concurrent enrollment, STE 105 or concurrent enrollment
 Reviews General, Obstetric/Gynecological and Urologic surgical procedures.

STE 115 Surgical Procedures II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: STE 100, STE 101, STE 105
 Reviews plastic, otorhinolaryngological, ophthalmologic and orthopedic surgical procedures.

STE 120 Surgical Procedures III

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: STE 100, STE 101, STE 105
 Reviews cardiac, peripheral vascular, and neurologic surgical procedures. This course includes a review of the instruments, equipment and supplies utilized during the preoperative, intraoperative, and postoperative phases of these procedures.

STE 179 Surgical Technical Seminar

2 Credit Hours • 30 Contact Hours (Lecture)
Prerequisite: STE 100, STE 101, STE 105, STE 110, STE 115, STE 181 or concurrent enrollment, STE 182 or concurrent enrollment, STE 183 or concurrent enrollment
 Allows Surgical Technology students to learn techniques helpful in passing the required national certification exam for surgical technology from the Association for Surgical Technologists.

STE 181 Internship I

4 Credit Hours • 180 Contact Hours (Internship)
Prerequisite: STE 100, STE 101, STE 105, STE 110, STE 115, STE 182 or concurrent enrollment, STE 183 or concurrent enrollment
 Allows students to integrate theoretical concepts in a clinical setting.

STE 182 Internship II

4 Credit Hours • 180 Contact Hours (Internship)
Prerequisite: STE 100, STE 101, STE 105, STE 110, STE 115, STE 181 or concurrent enrollment, STE 183 or concurrent enrollment
 Allows students to integrate advanced theoretical concepts in a clinical surgical setting.

STE 183 Internship III

6 Credit Hours • 270 Contact Hours (Internship)
Prerequisite: STE 100, STE 101, STE 110, STE 115, STE 181 or concurrent enrollment, STE 182 or concurrent enrollment
 Allows students to integrate advanced theoretical concepts in a clinical surgical setting.

Theatre Courses**THE 104 Basic Costume & Apparel Construction**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)
 Provides students with training in cutting and sewing techniques, as well as knowledge of fabric types, qualities, uses, and cleaning.

THE 105 Theatre Appreciation: AH1

3 Credit Hours • 45 Contact Hours (Lecture)
 Provides an opportunity to discover, analyze, and evaluate all aspects of the theatre experience: scripts, acting, directing, staging, history, criticism, and theory.

THE 108 Theatre Script Analysis: AH1

3 Credit Hours • 45 Contact Hours (Lecture)
 Explore methods of reading and analyzing a variety of diverse texts for the stage. Additionally, this course provides an opportunity to interpret theatre scripts through cultural lenses and dramaturgical research methods.

THE 111 Acting I

3 Credit Hours • 45 Contact Hours (Lecture)
Note: It is strongly recommended to take THE 105 before THE 111
 Covers basic acting techniques and approaches including scene study, improvisation, and script analysis. It includes practical application through classroom performance.

THE 112 Acting II

3 Credit Hours • 45 Contact Hours (Lecture)
Note: It is strongly recommended to take THE 105 before THE 112
 Continues to explore basic acting techniques and approaches including scene study, improvisation, and intermediate script analysis. It includes practical application through classroom performance.

THE 115 Stage Movement for Actors

3 Credit Hours • 45 Contact Hours (Lecture)
 Introduces the vocabulary of human movement, techniques of physical training, and anatomy and kinesiology for the actor. The course includes forms of basic dance and the coordination of movement with vocal delivery.

THE 116 Technical Theatre

3 Credit Hours • 45 Contact Hours (Lecture)
 Introduces methods of constructing and painting scenery and properties, operating stage lighting and sound equipment, and implementing costumes and multimedia. This course explores the proper procedures of serving on stage crews.

THE 126 Auditioning for Musical Theater

3 Credit Hours • 45 Contact Hours (Lecture)
 Builds a confident, talented, and exciting audition. It includes a mock videotaped audition, and covers resumes, head shots, repertoire choices, stage fright, 16-bar audition, and dressing for success. This course is presented in conjunction with producers from regional theaters providing valuable feedback for the participants.

THE 131 Theatre Production I

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)
 Allows students to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage managing, and administration is available.

THE 132 Theatre Production II

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)
Prerequisite: THE 131
 Allows students to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage managing, and administration is available.

THE 135 Stage Makeup I

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)
 Explores stage makeup design and application techniques including basic corrective, character, old age, animal, and fantasy applications.

THE 136 Stage Makeup II

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)
 Continues to examine theatrical makeup design and application techniques, adding prosthetics, hair design and other advanced applications.

THE 140 Stage Dialects

1 Credit Hour • 15 Contact Hours (Lecture)
 Teaches students to develop skills in nine dialects and accents.

THE 144 Scene Study

1 Credit Hour • 15 Contact Hours (Lecture)

Prerequisite: THE 111

Emphasizes the Stanislavski approach. Students will explore acting skills through advanced material, including Avant garde and classical.

THE 152 Production Stage Management I

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Prerequisite: THE 116

Focuses on the basics of stage management, including making a stage manager's book, organizational methods and protocols of production, calling cues in production and personnel relationships and responsibilities.

THE 181 Internship

1–3 Credit Hours • Per Credit Hour, 15 Contact Hours (Lecture)

Prerequisite: THE 111 or THE 144

Focuses on the selection and preparation of audition materials, including prepared monologues, cold reading, and improvisation techniques. Basics of resume preparation are also discussed.

THE 182 Internship

1-3 Credit Hours • Per Credit Hour, 45 Contact Hours (Internship)

Allows students to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage-managing, and administration is available.

THE 183 Internship

1-3 Credit Hours • Per Credit Hour, 45 Contact Hours (Internship)

Allows students to continue to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage managing, and administration is available.

THE 204 Voice & Articulation I

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Emphasizes vocal development including diction, enunciation, projection, dialects, and vocal interpretation of written materials. Students strive to eliminate regionalisms and tonal faults, e.g., nasality, stridency, sibilance, breathiness.

THE 211 Development of Theatre Greek-Renaissance: AH1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Surveys the history and development of theatrical practices from Ancient Greece to the Renaissance as well as non-western forms, emphasizing all aspects of performance from period values to analysis of dramatic literature and culture.

THE 212 Development of Theatre Restoration to Modern: AH1

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy

Surveys the history and development of theatrical practices from Restoration to the present as well as non-Western forms, emphasizing all aspects of performance from period values to analysis of dramatic literature and culture.

THE 213 Intermediate Acting I

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Reading & Writing Literacy, THE 112

Continues THE 112. Emphasis is on artistic concentration of voice and movement. A detailed character biography is required.

THE 215 Playwriting: AH1

3 Credit Hours • 45 Contact Hours (Lecture)

Develops playwriting techniques emphasizing elements of dramatic structure, dialogue, styles, creative writing, and theatrical practices.

THE 216 Theatre Lighting & Design

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: THE 116

Focuses on the theory and practice of stage lighting. Topics include basic electrical theory, color theories, rigging and design of lighting for the performing arts.

THE 220 Directing I

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: THE 111

Covers basic techniques for stage directing in contemporary theatre. Topics to be covered include stage composition, script analysis, work with actors, and the collaborative role of the director.

THE 231 Theatre Production III

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Prerequisite: College Reading & Writing Literacy, THE 111

Allows students to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage managing, and administration is available.

THE 232 Theatre Production IV

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Prerequisite: College Reading & Writing Literacy, THE 111

Allows students to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage managing, and administration is available.

THE 246 Rehearsal & Performance

1 Credit Hour • 30 Contact Hours (Lab)

Prerequisite: College Reading & Writing Literacy, THE 131

Gives the student actor practical experience in a real acting environment. Through the audition and rehearsal process the student's imagination and creative potential will be stimulated. Special attention will be given to characterization, stage movement, speech techniques, dramatic form and the rehearsal/production/performance process. The successful rehearsal and presentation of the current production to the public will be the focal point of their activities. Previous acting experience is helpful but not required.

THE 247 Rehearsal & Performance II

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

Prerequisite: College Reading & Writing Literacy, THE 131

Gives the student actor practical experience in a real acting environment. Through the audition and rehearsal process the student's imagination and creative potential will be stimulated. Special attention will be given to characterization, stage movement, speech techniques, dramatic form and the rehearsal / production / performance process. The successful rehearsal and presentation of the current production to the public will be the focal point of their activities. Previous acting experience is helpful but not required.

THE 248 Rehearsal & Performance III

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Prerequisite: College Reading & Writing Literacy, THE 131

Gives the student actor practical experience in a real acting environment. Through the audition and rehearsal process the student's imagination and creative potential will be stimulated. Special attention will be given to characterization, stage movement, speech techniques, dramatic form and the rehearsal / production / performance process. The successful rehearsal and presentation of the current production to the public will be the focal point of their activities. Previous acting experience is helpful but not required.

THE 255 Advanced Playwriting

3 Credit Hours • 45 Contact Hours (Lecture)

Continues to explore playwriting techniques developed in THE 215 for theatre and applies concepts of writing for movie, television, radio and animation scripts, with emphasis on the dramatic process and form.

Translation & Tourism Courses**TRI 101 Introduction to Translation & Interpretation**

3 Credit Hours • 45 Contact Hours (Lecture)

Presents an introduction to translation and interpretation including basic principles, procedures, and techniques; a portrait of the work duties of the various types of translators and interpreters; and theoretical foundations for translation and interpretation.

TRI 102 Business of Translation & Interpretation

2 Credit Hours • 30 Contact Hours (Lecture)

Presents an overview of the business of translation and interpretation including job searching, how to start a business, qualifications, and essential technologies.

TRI 103 Ethics for Translation & Interpretation

2 Credit Hours • 30 Contact Hours (Lecture)

Presents the general National and State ethical guidelines that govern the conduct of professional interpreters and translators and the role of cultural competence in effective translation and interpretation.

TRI 201 Consecutive Interpretation I

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: TRI 101, TRI 102, TRI 103

Presents the theory, history, and skills of consecutive interpretation and fosters the practical application of these skills.

TRI 202 Simultaneous Interpretation I

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: TRI 101, TRI 102, TRI 103

Presents the theory, history, and skills of simultaneous interpretation and fosters the practical application of these skills.

TRI 203 Sight Translation

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: TRI 101, TRI 102, TRI 103

Presents the theory, history, and skills of sight translation and fosters the practical application of these skills.

Veterinary Technology Courses**VET 102 Veterinary Medical Terminology**

1 Credit Hour • 15 Contact Hours (Lecture)

Introduces the student to the structure of veterinary medical terms with emphasis on using and combining the most common prefixes, roots and suffixes. Includes terms related to major body systems, oncology, psychiatry, as well as clinical laboratory and diagnostic procedures and imaging. Class structure provides accepted pronunciation of terms and relative use in the veterinary specific setting.

VET 103 Veterinary Assistant Restraint & Handling

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Introduces students to basic animal care skills and clinical procedures common to a veterinary assistant in practice. Laboratories provide practice in restraint, grooming and physical exam techniques.

VET 104 Assistant Large Animal Nursing

1 Credit Hour • 15 Contact Hours (Lecture)

Prerequisite: VET 103

Presents commonly encountered medical and surgical conditions of common large animal species with emphasis on the role of the veterinary assistant. This course focuses on handling and specific skills necessary for the profession.

VET 106 Exotic Animal Handling

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 108, VET 116, VET 205 (Grade of C or higher); VET 115 or concurrent enrollment, VET 183 or concurrent enrollment, VET 206 or concurrent enrollment, VET 223 or concurrent enrollment, VET 224 or concurrent enrollment

Designed to provide students knowledge and skills required for veterinary technicians. This course focuses on exotic animal husbandry, handling, restraint, and specific problems encountered with exotic animals.

VET 108 Introduction to Laboratory Procedures

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: BIO 111; VET 102 or concurrent enrollment, VET 116 or concurrent enrollment, VET 120 or concurrent enrollment, VET 205 or concurrent enrollment

Studies the biology, clinical appearance and laboratory diagnosis of parasitic diseases of veterinary and zoonotic importance.

VET 109 Applied Companion Animal Behavior

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Explores the topic of companion animal behavior and learning theory through critical reviews of behavioral literature and its implications for applied techniques in behavior and training. This course provides an understanding of how animals learn, how we can improve inter-species communication to reduce fear, stress, and anxiety, and how to apply this knowledge to the everyday treatment of animals under veterinary care.

VET 114 Vet Assistant Lab & Clinical Procedures

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 103, VET 120

Covers selected areas of common laboratory and diagnostic imaging procedures performed in a veterinary hospital. Emphasis is on assisting the veterinarian and/or veterinary technician with these procedures.

VET 115 Surgical Nursing

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 108, VET 116, VET 205 (Grade of C or higher); VET 106 or concurrent enrollment, VET 183 or concurrent enrollment, VET 206 or concurrent enrollment, VET 223 or concurrent enrollment, VET 224 or concurrent enrollment

Introduces surgical instruments and supplies, aseptic technique, and the roles of all surgical personnel in the field of veterinary medicine. This course covers commonly performed veterinary surgical procedures. This course meets the requirements of an American Veterinary Medical Association (AVMA) Veterinary Technology Program.

VET 116 Humane Treatment and Handling of Animals

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 102 or concurrent enrollment, VET 108 or concurrent enrollment, VET 120 or concurrent enrollment, VET 205 or concurrent enrollment

Focuses on humane animal handling techniques in a veterinary clinical setting. Restraint, medication administration, and common clinical procedures routinely performed by veterinary technicians will be covered.

VET 117 Veterinary Assistant Surgery & Nursing Care

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 103; VET 114 or concurrent enrollment

Introduces surgical assisting of the veterinarian and/or the veterinary technician, including basic knowledge of surgical instruments and surgery room hygiene. It also introduces basic nursing care of animal patients including safety concerns and nursing procedures.

VET 120 Office Procedures and Relations

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Presents common veterinary office procedures including administration, professional etiquette, client relations, career development and job searching skills. Enrichment of computer skills in relationship to current veterinary management software will be emphasized.

VET 134 Diagnostic Imaging

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 108, VET 116, VET 205, VET 206 (Grade of C or higher); VET 280 or concurrent enrollment

Covers selected areas of diagnostic imaging with an emphasis on radiology. Topics will include radiation properties, x-ray production, radiographic equipment, darkroom procedures, the radiographic image, animal positioning and radiation safety. An introduction to special imaging techniques such as computed tomography (CT scan) and ultrasound will also be included.

VET 182 Internship

2 Credit Hours • 90 Contact Hours (Internship)

Prerequisite: VET 108 (Grade of C or higher); VET 106 or concurrent enrollment, VET 115 or concurrent enrollment, VET 206 or concurrent enrollment, VET 223 or concurrent enrollment, VET 224 or concurrent enrollment

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

VET 183 Internship

2-3 Credit Hours • 45 Contact Hours per Credit Hour (Internship)

*Prerequisite: VET 103, VET 120**Note: VET 114 and VET 117 may be taken at the same time as VET 183*

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

VET 205 Veterinary Anatomy & Physiology I

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: BIO 111; VET 102 or concurrent enrollment, VET 108 or concurrent enrollment, VET 116 or concurrent enrollment, VET 120 or concurrent enrollment

Covers the anatomy and physiology of the following body systems: Integumentary, Skeletal, Muscular, Respiratory, Cardiovascular and Lymphatic. The main species covered will be canine, feline, equine, and bovine.

VET 206 Veterinary Anatomy & Physiology II

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 108 (Grade of C or higher)

Provides additional detail in anatomy and physiology of companion and farm animal species. The class covers interrelationships between body systems, such as respiratory, cardiovascular, urogenital, and reproductive. Additional topics

include metabolism and digestion, acid/base balance, neuroendocrinology, and reproductive endocrinology. Applied laboratory experiences are included.

VET 223 Introduction to Veterinary Anesthesia

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 106 or concurrent enrollment, VET 115 or concurrent enrollment, VET 183 or concurrent enrollment, VET 206 or concurrent enrollment, VET 224 or concurrent enrollment
Examines basic principles in veterinary anesthesiology, including the role of the veterinary technician anesthetist, important concepts relating to various types of anesthesia, preparation of anesthetic equipment and machine, pre-operative patient management, and recording information during anesthesia.**VET 224 Pharmacology for Veterinary Technicians**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 108 (Grade of C or higher)

Provides background in pharmacology principles including topics such as: mechanism of drug action, types of drugs, anesthetic agents, pharmacy management and calculations related to drug dosages.

VET 225 Anesthesiology

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 108, VET 115, VET 183 (Grade of C or higher)

Covers all stages of an anesthetic event (pre-, peri-, post-op) including patient evaluation, appropriate forms of injectable and gaseous anesthesia for surgical and diagnostic procedures, and a working knowledge of equipment used during the anesthetic event. Other topics include anesthesia monitoring, response to complications, and surgical pain management. Species covered include canine, feline, bovine, equine, and an overview of exotics.

VET 227 Animal Nutrition

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 205, VET 206 (Grade of C or higher)

Gives students a foundation in the principles of animal nutrition. The course focuses on the basic elements of nutrition including the major categories of nutrients, and their sources, digestion, and metabolism. Both large and small animal feeds and feeding will be covered. The course emphasizes the relationship between nutrition and health.

VET 232 Veterinary Dentistry

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Examines essentials in veterinary dentistry as it concerns the veterinary technician, including dental morphology, performing a dental exam, identifying common dental problems, equipment used to perform a professional dental cleaning, the proper steps to perform a professional dental cleaning, and the role of veterinary technician in client education and preventative home care.

VET 238 Small Animal Nursing

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 225, VET 227, VET 241, VET 281 (Grade of C or higher)

Presents commonly encountered medical and surgical conditions of the dog and cat with emphasis on the role of the veterinary technician. This course focuses on nursing concepts and specific skills necessary for the profession. Laboratory sessions will provide a hands-on teaching experience.

VET 239 Large Animal Nursing

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 225, VET 227, VET 241, VET 281 (Grade of C or higher)

Presents commonly encountered medical and surgical conditions of common large animal species with emphasis on the role of the veterinary technician. This course focuses on nursing concepts

and specific skills necessary for the profession. Laboratory sessions will provide a hands-on teaching experience.

VET 241 Clinical Laboratory Procedures

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 183, VET 223 (Grade of C or higher)

Discusses the biochemical derangements that characterize disease. Topics include proper collection and analysis of urine, blood, and cytological samples; basic principles of anatomic pathology; necropsy procedure and sample collection.

VET 242 Veterinary Critical Care

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 225, VET 241, VET 281 (Grade of C or higher)

Provides instruction in appropriate nursing assessment, monitoring and intervention with emergencies. Uses knowledge and understanding of overall anatomy, physiology, and disease or accident process to assist in veterinarian's diagnoses and treatment.

VET 250 Clinical Competency Evaluation

1 Credit Hour • 15 Contact Hours (Lecture)

Prerequisite: VET 108, VET 115, VET 134, VET 183, VET 224, VET 225, VET 227, VET 241, VET 281 (Grade of C or higher)

Evaluates the students' clinical skills and knowledge after successful completion of the internship courses, in order to prepare them for the national board examination and clinical practice. Evaluation of clinical skills and knowledge includes selected clinical laboratory techniques (parasitology, hematology, urinalysis, cytology, chemistry, serology, microbiology); diagnostic imaging; office procedures; surgical preparation, instrumentation and assistance; anesthesia induction, maintenance and monitoring; restraint and handling techniques; small, large and laboratory animal diagnostic and therapeutic techniques; and pharmacology calculations, labeling and drug classification.

VET 280 Internship

1 Credit Hour • 45 Contact Hours (Internship)

Prerequisite: VET 116, VET 205, VET 206 (Grade of C or higher); VET 134 or concurrent enrollment

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

VET 281 Internship

3 Credit Hours • 135 Contact Hours (Internship)

Prerequisite: VET 183 (Grade of C or higher)

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

VET 282 Internship

4 Credit Hours • 180 Contact Hours (Internship)

Prerequisite: VET 281, VET 225, VET 241 (Grade of C or higher)

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

Water Quality Management Courses

WQM 100 Introduction to Water Quality

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Quantitative Literacy

Introduces environmental concepts utilized in the water industry. The course covers how the subjects of geology, chemistry, biology,

and physics influence the water industry, the hydrologic cycle on a global scale, and how to monitor and maintain water quality.

WQM 105 Specific Calculations for Water Quality Management

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: College Quantitative Literacy

Provides an in-depth study of the calculations associated with water and wastewater treatment. Topics include dimensional analysis, manipulation of conversion factors, geometric figures, velocities, detention time, surface loading, filtration and backwash rates, porosity, weir overflow rates, efficiencies, weight of dry solids, sludge pumping, settleable solids, volatile solids, mean cell residence times, settleability, disinfection and chemical dosage as relating to trickling filters, ponds, RBC, and activated sludge.

WQM 106 Mechanical – Physical Treatment

3 Credit Hours • 45 Contact Hours (Lecture)

Serves as a basic introduction into wastewater treatment. Topics include the technician and their responsibility, effects of waste discharges, natural cycles, solids in wastewater, NPDES permits, collection systems, pretreatment, primary treatment, secondary treatment, advanced treatment, flow measuring, solids handling and disposal.

WQM 109 Water Distribution

3 Credit Hours • 45 Contact Hours (Lecture)

Covers the purpose, selection and location of water storage facilities and the operation and maintenance of related equipment. Topics include storage facilities and capabilities, booster pumps, water mains and appurtenances, joints, pipe protection and installation, valves, fittings and hydrants. Water quality standards, contaminants and degradation inspection and monitoring, system troubleshooting, surveillance, cross connections, pressure main breaks, corrosion control, disinfection and emergency planning are also covered.

WQM 115 Water Sources & Supplies

3 Credit Hours • 45 Contact Hours (Lecture)

Provides an introduction into the water supply systems and sources of water. Topics include sources and selection of water, water quality problems, reservoir management, intake structures, well and introductory plant operations.

WQM 116 Conventional Surface Water Treatment

3 Credit Hours • 45 Contact Hours (Lecture)

Covers coagulation, flocculation, sedimentation, filtering, corrosion and taste and odors. Topics for each process include descriptions, operating procedures, associated calculations, start-up and shut down procedures, laboratory tests, troubleshooting, maintenance, safety and records.

WQM 118 Wastewater Collection Systems

3 Credit Hours • 45 Contact Hours (Lecture)

Covers the purpose, components and design of collection systems. Topics include safety procedures, inspection and testing, pipeline cleaning and maintenance, underground repair, lift stations and sewer rehabilitation.

WQM 119 Basic Water Quality Analyses

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Introduces laboratory analyses done in the water industry. The course covers the functionality and use of analytical instruments for safely analyzing water samples for common parameters relevant to the water industry. Water chemistry topics are explored to explain the use and function of the instrumentation.

WQM 120 Water Quality Equipment Maintenance

4 Credit Hours • 60 Contact Hours (Lecture)

Provides a general understanding of mechanical and electrical equipment and its maintenance. Topics include safety

procedures; correct use of power and hand tools; and preventive maintenance and repair maintenance of pumps, motors, chlorinators, motor control units, and other treatment plant equipment.

WQM 126 Safety & Security Systems

3 Credit Hours • 45 Contact Hours (Lecture)

Provides a study of safety procedures performed in the water and wastewater industry. This course covers the importance of safety and how to implement safety practices in the workplace by studying OSHA guidelines, driving practices, confined spaces, and chemical handling.

WQM 200 Hydraulics for Water Quality Management

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: WQM 105

Introduces the mathematical principles of density, specific gravity, pressures, horsepower and energy costs, velocities, weirs, parshall flumes, venturi meters, California Pipe method, flows from open end pipes, settling velocities and classification of flows.

WQM 212 Drinking Water Regulations

4 Credit Hours • 60 Contact Hours (Lecture)

Provides the knowledge and skills to implement a compliance-monitoring program for a water treatment facility using groundwater or source water. The topics covered include all regulatory requirements found in the Safe Drinking Water Act regarding microbial and chemical contamination for monitoring and reporting operations.

WQM 216 Biological & Bacteriological Water Quality Analyses

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Provides an in-depth study of microorganisms in the water industry. The course covers analysis of various water samples to identify different microorganisms and explore how these impact the water industry. Interpretation of mathematical formulas, instrumentation application, and proper lab protocols are covered.

WQM 280 Internship

3 Credit Hours • 135 Contact Hours (Internship)

Prerequisite: WQM 100, WQM 105, WQM 106, WQM 109, WQM 115, WQM 116, WQM 118, WQM 120, WQM 200, WQM 212, WQM 216

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

WQM 289 Capstone

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture/Lab Combination)

Prerequisite: WQM 100, WQM 105, WQM 106, WQM 109, WQM 115, WQM 116, WQM 118, WQM 119, WQM 120, WQM 126, WQM 200, WQM 212, WQM 216

Provides a demonstrated culmination of learning within a given program of study.

Welding Courses

WEL 100 Safety for Welders

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Covers the hazards of welding on health and safety.

WEL 106 Blueprint Reading for Welders & Fitters

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Covers interpretation and creation of weld symbols and blueprints used in metal fabrication.

WEL 113 Oxyfuel & Plasma Cutting

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Outlines the skills needed to set up equipment and perform cutting and gouging operations utilizing the oxyacetylene and plasma arc cutting processes.

WEL 114 Oxyacetylene Welding

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Teaches the skills necessary to perform safety inspections, make minor repairs, adjust operating parameters, operate oxyacetylene welding equipment, and perform oxyacetylene welding, brazing, and soldering operations.

WEL 115 Autobody Welding & Cutting

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Introduces welding in all positions on light gauge carbon steel using the GMAW and OAW processes on various joint configurations. Student should be familiar with basic metallurgy pertaining to the weldability of metals, structural joints, and safety in the welding industry.

WEL 121 Structural Welding I

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Covers theory and practice in oxy-acetylene processes with emphasis toward AWS welder qualification with mild steel electrode E-7018 welding in the horizontal and vertical position.

WEL 122 Structural Welding II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: WEL 121

Continues WEL 121 with final emphasis toward AWS welder qualification with mild steel electrode E-7018 qualification test in the 2G, 3GU, and 4G position.

WEL 124 Gas Tungsten Arc Welding I

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

WEL 125 Introduction to Gas Metal Arc Welding

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Covers welding in all positions and on various joint configurations using the GMAW (mig) welding process on carbon steel, stainless steel, and aluminum. Student should be familiar with basic metallurgy pertaining to the weldability of metals, structural joints, and safety in the welding industry.

WEL 130 Maintenance Welding

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Gives the student a basic understanding of the Oxyacetylene cutting and Arc welding processes, and introduction to the skills and techniques used to develop fillet and groove welds. Students will be introduced to oxyacetylene, shielded, gas metal arc welding equipment set up, and various welding techniques. Safety will be stressed during the course.

WEL 180 Internship

1-4 Credit Hours • Per Credit Hour, 45 Contact Hours (Internship)

Note: Must have faculty consent to enroll

Meets the needs of the student in selected specialized area in a work-based environment. Individualized instruction at the job site will be set up based on student's interest and instructor approval.

WEL 200 Advanced CAD/CAM Cutting Processes

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: MAC 240

Covers designing and generating images using Mastercam Cad software. Student will be able to cut developed images/parts using Koike Monograph CNC Plasma cutting table. Student should be familiar with basic metallurgy pertaining to the plasma cutting of metals and safety in the welding industry.

WEL 205 Introduction to Ornamental Iron

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Note: Must have Instructor permission to enroll

Covers designing, drawing and fabricating a welded project. Student will demonstrate their ability to use (in a practical application) previously learned techniques using different welding processes.

WEL 224 Gas Tungsten Arc Welding II

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: WEL 124

Covers Gas Tungsten Arc Welding (GTAW) operations utilizing a variety of base metals and advanced joint designs.

WEL 225 Advanced Gas Metal Arc Welding

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: WEL 125

Covers welding in all positions on carbon steel plate with the GMAW process. Student should be familiar with basic metallurgy pertaining to the weldability of metals, structural joints, and safety in the welding industry.

WEL 230 Pipe Welding I

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: WEL 122, WEL 224, WEL 225

Covers pipe welding operations utilizing the Shielded Metal Arc Welding (SMAW) process in a variety of positions on carbon steel.

WEL 231 Pipe Welding II

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: WEL 230 or concurrent enrollment

Covers pipe welding operations utilizing processes and positions.

WEL 240 Pipe Welding Certification

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: WEL 231

Introduces theory and practice in modern welding methods of pressure pipeline and pipe systems. Emphasis toward welder qualification under various codes.

WEL 250 Layout & Fabrication

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: WEL 106

Develops welding and associated skills in metal fabrication.

WEL 263 Applied Metal Properties

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Note: Instructor approval required

Introduces the study of metal properties, hardness testing, heat treatment, cold working microscopic examination and application of common commercial alloys in industry.

WEL 264 Creative Welding

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Note: Instructor approval required

Introduces design and construction of welded sculptures with the use of different fabrication techniques. This course includes uses of different metalworking machines, hot and cold working practices, and demonstration of coloring and texturing metal.

WEL 280 Internship

1-4 Credit Hours • Per Credit Hour, 45 Contact Hours (Internship)

Note: Must have faculty consent to enroll

Offers individualized instruction at job site. The student is encouraged to develop skills needed to enter employment in the welding industry.

WEL 289 Capstone

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Demonstrates culmination of learning within a given program of study.

Women and Gender Studies Courses

WST 200 Introduction to Women's Studies: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Explores the interdisciplinary field of women's studies. This course is an examination of the following topics: the historical basis of gender inequality; the history of social movements for gender equality and women's studies; women's achievements throughout history in various professional and academic fields; women's social, economic, religious, health and political status in the U.S. and around the globe; gender relations; intersectionality; cultural, media and artistic representations of women.

WST 225 Women & Social Action: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Explores the role of the systems of oppression in society and avenues available to create both individual and collective change through social action. Awareness of agency to enact change and become empowered are highlighted in the course. Informed by intersectional feminist pedagogy, this course explores issues of diversity including, but not limited to race, class gender, age, and disability.

Zoo Keeping Courses

Z00 101 Introduction to Captive Animal Management

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Introduces the science utilized in the field of animal management. Incorporates terminology, protocols and procedures, governing bodies, career development, and dealing with public relations. This course examines the taxonomic hierarchy of how the natural world is arranged and how various taxa are organized in the scientific community.

Z00 102 Primates: Prosimians and Monkeys

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Studies captive and wild populations of "lesser" primates with regards to taxonomy, biology, morphology, adaptations, social groupings, husbandry, and conservation issues.

Z00 103 Introduction to Animal Training

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Teaches the basics of classical and operant conditioning and the shaping of animal behavior in a captive setting. This course provides the information and tools on how to develop and implement training programs and condition behavior. This course concentrates on the utilization of positive reinforcement techniques and troubleshoots training challenges. This course explores advances in the use of training during public demonstrations.

Z00 104 Animal Training

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Teaches the basics of classical and operant conditioning and the real-world application of shaping animal behavior in a captive setting. Provides the information and tools on how to develop and implement training programs and condition behavior. Concentrates on the utilization of positive reinforcement techniques and troubleshoots training challenges. Explores advances in the use of training during public demonstrations.

Z00 107 Animal Behavior

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Provides a brief history of ethology, forms of animal communication, the sensory world of animals, programmed vs. learned behavior, navigation, and mating behaviors. Students will be given an in-depth look at how animal behavior is affected by a zoo environment and how to correct stereotypic behaviors that are often seen in captive animals.

ZOO 110 Wild Cats-Conservation & Management

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Explores the Family Felidae, in both the wild and captive settings. This intensive course will provide the student with a working knowledge of the care, management and conservation of felids.

ZOO 111 Ungulates-The Hoofed Mammals

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Exclusively explores the ungulates, in both the wild and captive settings. This intensive course will provide the student with a working knowledge of the care, management and conservation of hoofed mammals.

ZOO 113 Pachyderms: Hippos, Rhinos & Elephants

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: ZOO 125 recommended, but not required
Explores the natural history and conservation of pachyderms. Evaluate husbandry requirements for housing pachyderms in a captive setting.

ZOO 114 Wild Canids

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: ZOO 125 recommended, but not required
Explores the care and management of the Family Canidae in both captive and wild settings. Challenges in conservation efforts for animals that are both feared and revered as well as human-canine conflicts will be extensively explored.

ZOO 115 Bird Husbandry

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Prerequisite: BIO 103 (Grade of C or higher), ENG 121 or ENG 131 (Grade of C or higher)
Teaches bird biology and husbandry and supplies the student with a working knowledge of the captive care and management of birds. Students will also study the human impacts on wild bird populations and the resulting conservation initiatives.

ZOO 117 Biodiversity & Conservation

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Introduces concepts relating to the conservation of the natural world. This course examines biodiversity and the relationships between animals and their environment. This course explores the environmental, political, economic, and sociological issues relating to the loss of biodiversity on the planet as well as efforts in place to be implemented by zoos and conservation organizations to counter those effects.

ZOO 120 Bats: An Introduction

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Explore why bats, representing 20 percent of all mammalian species, are still misunderstood and maligned. This class will demystify bats as well as give students a new appreciation for this umbrella species. Wild populations and husbandry of captive populations will be covered.

ZOO 122 Primatology: Captive Apes

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Explores lesser and great ape populations in both captive and wild habitats. Examines the roles zoos play in conservation initiatives for ape species. Discusses the impact apes have had on human culture. Reviews ape language studies and the ethics of housing apes in captivity.

ZOO 125 Mammal Husbandry

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Prerequisite: BIO 103 (Grade of C or higher), ZOO 101 (Grade of C or higher)
Studies mammalian biology and husbandry and creates a working knowledge of the captive care and management of mammals. Students will also study taxonomy, reproductive physiology, preventative medicine, animal nutrition, capture and restraint,

population management, enrichment, and zoo-based conservation initiatives. Compares captive and wild populations and the differences and correlations between them.

ZOO 145 Zoonotic Preventative Medicine

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ZOO 101

Covers zoonotic preventative medicine and veterinary zookeeping concepts and techniques. Supplies a working knowledge of a keeper's role in exotic animal care and medicine, including the importance of nutrition. This course introduces common diseases and parasites that affect a variety of exotic animals as well as how to treat and prevent those illnesses.

ZOO 155 Invertebrate Zoology

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Prerequisite: BIO 103; MAT 103 or MAT 107

Explores the diversity of invertebrate species and the complex interactions with their environments. Examines the principles of ecology, evolution, classification, structure, and function in invertebrate species.

ZOO 165 Herpetology

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Prerequisite: BIO 103, ENV 101

Explores the diversity of reptile and amphibian species. This course examines the principles phylogenetics, the origin and evolution of amphibians and reptiles, the global diversity of these taxa, and their biogeography, biology, ecology, and conservation.

ZOO 180 Zoo Keeping Internship I

5 Credit Hours • 225 Contact Hours (Internship)
Prerequisite: COM 115 or COM 214 (Grade of C or higher), ZOO 115 (Grade of C or higher), ZOO 125 (Grade of C or higher), ZOO 155 (Grade of C or higher), ZOO 165 (Grade of C or higher), NOTE: Minimum GPA 3.0
Grading: P/F only

Provides hands-on work experience at an approved animal care facility. Introduces the student to animal care standards as required by the USDA and AWA. Student will become competent in the care of the animals studied within each internship. Requires a 2.8 GPA.

ZOO 181 Zoo Keeping Internship II

5 Credit Hours • 225 Contact Hours (Internship)
Prerequisite: ZOO 180
NOTE: Minimum GPA 3.0
Grading: P/F only

Provides hands-on work experience at an approved animal care facility. Expands on the knowledge and skills learned in ZOO 180 and the student will demonstrate an increased ability to apply those learned skills. Student will become competent in the care of the animals studied within each internship. Internship may be performed at the same facility or a different facility as ZOO 180. Requires a 2.8 GPA.

ZOO 200 Advanced Exhibitory Techniques

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Requires successful completion of the Exhibit Design for Zoo Keepers course. Students will apply practical basics of keeper level exhibit design and renovations. Students will develop and implement changes within an existing or new exhibit using hands-on techniques and applications. Students will gain an understanding of the dynamics of building an exhibit that meets both animal needs and enables proper husbandry. Students will learn skills that enable them to construct exhibits and design components that can be incorporated into animal exhibits.

ZOO 203 Animal Training in Action

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: ZOO 103 (Grade of C or better), ZOO 107 (Grade of C or better)

This course is designed for hands-on application of training techniques and principles. Requires a live animal training subject for implementation of training skills.

ZOO 206 Exhibit & Horticulture Design for Zoo Exhibits

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Design zoo habitats to include plant and animal specimens. Students will plan, interpret, construct, and enrich animal enclosures according to individual animal needs. Students will propagate and care for plants that will become key components for animal enclosures.

ZOO 245 Fish Husbandry & Aquaria Management

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: BIO 103 or concurrent enrollment or BIO 150 or concurrent enrollment

Studies fish biology in relation to captive care and management. This course compares captive and wild populations and the differences and correlations between them. This course provides a working knowledge of the care of aquatic life, including management of closed systems and the process in which proper water quality parameters are maintained.

ZOO 255 Aquatic & Terrestrial Invertebrate Husbandry

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: BIO 103 or concurrent enrollment or BIO 150 or concurrent enrollment

Studies invertebrate biology in relation to captive care and management. This course compares captive and wild populations and the differences and correlations between them. This course provides a working knowledge of the care of aquatic and terrestrial life, including management of large population invertebrate collections.

ZOO 265 Reptile & Amphibian Husbandry

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: ZOO 101 (Grade of C or higher), ZOO 107 (Grade of C or higher), ZOO 117 (Grade of C or higher)

Studies herpetology as it relates to the housing of captive herptiles and the conservation of wild ones. This course includes hands-on experience with the proper care and handling of a range of herptiles to include snakes, lizards, turtles, and amphibians.

ZOO 280 Zoo Keeping Internship III

5 Credit Hours • 225 Contact Hours (Internship)

Prerequisite: ZOO 181

NOTE: Minimum GPA 3.0

Grading: P/F only

Provides hands-on work experience at an approved animal care facility. Expands on the knowledge and skills learned in ZOO 180 and ZOO 181. Student will demonstrate an increased ability to apply those learned skills. Student will become competent in the care of the animals studied within each internship. Internship may be performed at the same facility or a different facility as ZOO 180 and ZOO 181. Requires a 2.8 GPA.

ZOO 281 Internship – Abroad

5 Credit Hours • 225 Contact Hours (Internship)

Prerequisite: BIO 150; successful completion or concurrent enrollment in ZOO 105 and/or ZOO 125

Grading: P/F only

Provides work experience at a pre-approved facility. The student will become competent in the care of the animals within a specified area of study.

COLLEGE ADMINISTRATIVE STAFF

In This Section

Officers of the College.....	285
President's Staff.....	285
Instructional Services Staff	285
Administrative Services Staff	285
Foundation Staff	286
Human Resources Staff.....	286
Marketing and Communications Staff	286
Student Services Staff.....	286

Officers of the College

President	Lance Bolton
Vice President for Administrative Services	Duane Risse
Vice President for Student Services	Homer Wesley
Vice President for Instructional Services	Joshua Baker

President's Staff

Executive Director of Diversity, Equity, and Inclusion	Keith Barnes
Executive Director, Foundation	Lisa James
Executive Director of Human Resource Services	Carlton Brooks
Executive Director of Institutional Effectiveness	Patricia Diawara
Executive Director of Marketing and Communications	Warren Epstein

Instructional Services Staff

Associate Vice President of Academic Resources	Jacquelyn Gaiters-Jordan
Associate Vice President of Strategic Partnerships	Chelsy Harris

Deans

Business, Public Service & Social Sciences	
Dean	Rob Hudson
Associate Dean of Law, Public Safety, and Human Services	John Brower
Associate Dean of Business and Technology	C. Dallas Pierce
Communications, Humanities, and Technical Studies	
Dean	Frances Hetrick
Associate Dean of Fine Arts and CTE	Sharon Hogg
Associate Dean of Humanities	Benjy Davies
High School Programs/Workforce Development	
Associate Dean	Janet Avion
Math and English	
Dean	Joseph Southcott
Associate Dean of Math	Jeffrey Joles
Associate Dean of English	Audrey Hillyer
Medical Sciences	
Dean	Montse Edie-Korleski
Associate Dean	Amber Lippincott

Natural and Physical Sciences

Dean	Kristen Johnson
Associate Dean	Michael Madson

Directors

EMS Medical Director	Jeremy DeWall
Emergency Services Administration	Teresa Ward
Corporate and Workforce Training	Ollie Mannino
Instructional Support	Rose Angry
Law Enforcement Academy	Cathy Labrecque
Learning Support Services	Andrew Scott
Simulation Center	Doug Murphy

Assistants

Assistant Dean of High School Programs and Concurrent Enrollment	Sharon Tunson
Assistant Director of Concurrent Enrollment	Kourtney Goya
Assistant Director of Concurrent Enrollment	Jenilee Williams
Assistant Director of Instructional Support for Perkins	Abby Corcoran
Assistant to the Associate Vice President for Strategic Partnership	Shonda Green
Assistant to the Dean of Academic Resources	Stephanie Long
Assistant to the Dean of Business, Public Service, and Social Sciences	Mara Pinell
Assistant to the Dean of Communications, Humanities, and Technical Studies	Hettie Myers
Assistant to the Dean of Math and English	Cheryll McLean
Assistant to the Vice President for Transfer, Articulation, and Advising	Wayne Artis
Assistant to the Vice President of Instructional Services	Keragan Ettleman

Coordinators

AHA Training Center	Kenda Cruz
Career Pathways	Joy Zincone
Clinical Coordinator	Christine Johnson
Culinary Arts Lab	Christine Gaccetta-Sharp
Faculty Pay and Event Schedule	Sylvia Whiteman
Faculty Pay and Training	Tierra Martinez
Instructional Coordinator of Medical Sciences	Steven Grippo
Lab Coordinator, Natural and Physical Sciences	Stephanie Pauley
Nursing Sim Lab, Medical Sciences	Nadine Costandine

Administrative Services Staff

Directors

Auxiliary Services	Lorelle Davies
Budget Services	Alberto Teixeira
Chief Technology Officer	Cyrille Parent
Procurement	Rockie Hurrell
Facilities Maintenance and Operations	Clint Garcia
Financial Services/Controller	Michelle Fraser-Mills

Assistants

Assistant Chief Technology Officer	Fabrizio Labate
Assistant Director of Business Services	Shae Farrar

Coordinators

Computer Assisted Instructional Lab	Ernest Hughes
IT Asset Management and Software Compliance Coordinator	Michael McCullough

Managers

Bookstore, Assistant Store Manager	Stuart Hetzler
Bookstore, Copy and Print Operations	Patrick Stalnaker
Bookstore, Course Materials	Steve Dunn
Bookstore, General Manager	Ryan Schnackel
Facilities & Operations, Capital Projects	Mark Nash
Facilities & Operations, Operations Maintenance	Roland Scobee
Facilities & Operations, Project Manager	Daniel Malcom
Facilities & Operations, Resource and Finance Manager	Jo Walker
Financial Services, Accounting	Angela Billings
Financial Services, Accounts Receivable	Christine (Betty) Long
Financial Services, Payroll	Barb Grusing
Financial Services, Restricted Funds	Karen Agner
ITSS, Client Services	Jack Hurney
ITSS, Client Services	Robert Willis
ITSS, Customer Service Desk	Mustafa Akcadogan
ITSS, IT Systems Manager	Greg Mehlhose
ITSS, Manager of Audiovisual Services	Carl Ellis
ITSS, Network Operations Manager	Jami Everett

Diversity, Equity, and Inclusion Staff

Multi-cultural Coordinator	Ben Gallegos-Pardo
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Foundation Staff

Assistant Director	Jessica Knudtson
Scholarship Coordinator/Ombuds	Sarah Kitonsa

Human Resources Staff

Assistant Director of Human Resource Services	Kim Hennessy
Human Resource Services Coordinator	Lakisha Boggs
Human Resource Services Manager	Michele Hodge
Manager of Development and Leadership Advancement	Ashlee Dutton
Talent Acquisition Manager	Patricia Padeway

Marketing & Communications Staff**Coordinator**

Art and Graphic Design	Noel Dolan
Communications	Karen Kovaly
Marketing Project Manager	Tamara Cannafax

Student Services Staff

Associate Vice President of Student Services	Dawna Haynes
Special Assistant to the Vice President of Student Services	Rachel Campbell
Dean of Students	Nichole Pritchett-Hilliard

Directors

Accessibility Services/CAC	Maria Mesa
Admissions, Recruitment, and Enrollment Services	Kevin Hudgens
Advising and Testing	Lincoln Wulf
Child Development Center	Jennifer Hopper
Counseling Center	Yolanda Harris
Chief of Campus Police	James Barrentine
Financial Aid	Ronald Swartwood
Military and Veterans Programs	Paul DeCecco
Registrar	Twila Humphrey
Retention	Sylvia Garcia
Student Life	Ricardo Perez
TRIO Student Support Services	Laura Mullane

Assistant Director

Advising and Testing	Brook Koltun
Assistant Registrar	Stephanie Snyder
Financial Aid Compliance and Fraud	Rhonda Johnson
Financial Aid for Customer Service and Technology	Kristina Moss
Military and Veterans Programs	Gail Bicknell

Coordinators

Accommodative Testing	Tor Nylander
Administrative Services	Lorinda Brinson
CCAMPIS Grant	Joneila Henselman
Child Development Center, CC	Cynthia Davis
Child Development Center, RRC	Myra Sprague
Emergency Services and Clery Compliance	Robin Widmar
New Student Orientation	Megan Castro
Recreation and Wellness	Carolyn Owen
Student Recruitment	Zachary Lebsock
Student Services Communications	Hannah McNamee
Student Support	Amner Carmona Molina
Sustainability	Konrad Schlarbaum

Managers

Enrollment Services	Jennifer Morrison
Military and Veterans Programs	Leona Lopez

Assistant Coordinators

Administrative Services for Advising and Testing	Meghann Austin
Child Development Center, CC	Carrie Duncan
Child Development Center, CC	Kendra Martin
Child Development Center, RRC	Michele Elthorp
Testing Center	Luisa Rincon

FACULTY & STAFF

In This Section

State Board for Community Colleges & Occupational Education
 Non-Voting Board Members
 Colorado Community College System
 Pikes Peak Community College Advisory Council.....
 Pikes Peak Community College Catalog Team

ABITBOL, Elizabeth

Laboratory Coordinator I, Division of Natural and Physical Sciences

ACRES, Harley, M.A., University of Alabama, 2007

Faculty of Art, Division of Communications, Humanities & Technical Studies

ADAMS, Diane

Technician III, Military & Veterans Programs

ADDINGTON, Pamela

Technician III, Human Resource Services

AGGEN, Teresa, M.A., Stephen F. Austin State University, 1991

Associate Professor of English, Division of Math & English

AGNER, Karen

Restricted Funds Manager, Financial Services

AGNEW, Jason

Grounds & Nursery I, Facilities & Operations

AGUERO, Theresa L.

Office Manager I, Division of Natural and Physical Sciences

AKCADOGAN, Mustafa, M.B.A., Colorado Technical University, 2009

Vocational Credentials
 Customer Service Desk Manager, Information Technology Support Services

AKLIGBE, Akossiwa

Custodian II, Facilities & Operations

AKSE, Kristian, B.A., Carleton College, 1993

Vocational Credentials
 Faculty of Multimedia Graphic Design, Career Start

ALVARAN, Reginald

Custodian I, Facilities & Operations

ANDERSON, Ginger, M.S., University of Colorado, 2006

Associate Professor of Mathematics, Division of Math & English

ANDERSON, Miki, M.A., West Virginia University, 2005

Associate Professor of Economics, Division of Business, Public Service & Social Sciences

ANDERSON, Tracey

Administrative Assistant III, Admissions, Recruitment & Enrollment Services

ANGRY, Rosaria, M.S., Troy University, 2004

Director of Instructional Support, Instructional Services

ANIBAS, Kyle, M.A., Kansas State University, 2014

Faculty of Geography, Division of Natural and Physical Sciences

ARMIJO, Marah

Administrative Assistant III, Admissions, Recruitment & Enrollment Services

ARNOLD, Christine, M.A., University of Colorado, 2005

Assistant Professor of Mathematics, Division of Math & English

ARTIS, W. Wayne, M.A., University of Delaware, 1977

Professor of History, Division of Communications, Humanities & Technical Studies
 Assistant to the VPIS for Transfer, Articulation & Advising

ASHTON, Holly, M.S., Iowa State University, 1986

Professor of Mathematics, Division of Math & English

AUSTIN, Meghann, A.A.S., Pikes Peak Community College, 2013

Assistant Coordinator of Administrative Services in Advising & Testing, Advising & Testing

AVION, Janet

Associate Dean of High School Programs, High School Programs

BABIN, Dave

Student Services Specialist II, Financial Aid

BADOVINAC, Emily, M.A., Colorado State University, 2013

Faculty of English, Division of Math & English

BAKER, Connie, A.A.S., Pikes Peak Community College, 2007

Administrative Assistant III, Accessibility Services

BAKER, Joshua, Ph.D., Oregon State University, 2014

Vice President for Instructional Services

BAKER, Patricia

Administrative Assistant III, Records

BALDWIN, Carrie, M.A., Syracuse University, 2002

Professor of Mathematics, Division of Math & English

BARBER, Heather

Administrative Assistant III, Admissions, Recruitment & Enrollment Services

BARLOW, Carol

Administrative Assistant III, Division of Natural and Physical Sciences

BARNES, Keith, M.S., Northern Illinois University, 1998

Executive Director of Diversity, Diversity, Equity, and Inclusion

BARNES, Susan

Police Officer I, Campus Police

BARRENTINE, James, B.S., Colorado Christian University, 1995

Vocational Credentials
 Chief of Campus Police
 Director of Emergency Management

BARRIERA, Nicole

Vocational Credentials
 Faculty of Pharmacy Technician, Division of Medical Sciences

BAUER, Chad, A.A.S., Pikes Peak Community College, 2005

Police Officer III, Campus Police

BAUER, Patricia

Administrative Assistant II, Instructional Support

- BEARER, Lora Anna
Administrative Assistant III, Military & Veterans Programs
- BECCO, Jo Ellen, M.A.T., University of Iowa, 1994
Faculty Director, High Impact Practices
- BEDFORD, Nelene, B.A., Regis University, 2002
Administrative Assistant III, Military & Veterans Programs
- BESSEY, Kimberley
Accounting Technician II, Financial Services
- BEN-AMOTS, Laura, M.F.A., The University of the Arts, 1992
Professor of Art, Division of Communications, Humanities & Technical Studies
- BENSON, Jennifer, M.A., University of Colorado, 2013
Assistant Professor of English, Division of Math & English
- BEYER, Jill
Accounting Technician IV, Financial Services
- BHAGAT, Brook, M.F.A., Lindenwood University, 2016
Assistant Professor of English, Division of Math & English
- BICKNELL, Gail A., B.A., University of Maryland, 2011
Assistant Director of Military & Veterans Programs, Military & Veterans Programs
- BILLINGS, Angela, B.S.B.A., University of Arizona, 1990
Accounting Manager, Financial Services
- BJORKMAN, Sharon, Ph.D., Loyola University, 2004
Professor of Sociology, Division of Business, Public Service & Social Sciences
- BLAKE, Esther
Custodian I, Facilities & Operations
- BLAKE, Shari, B.A., Colorado Christian University, 2015
Lead Teacher, Child Development Center
- BLOCK, Heidi
Vocational Credentials
Assistant Professor of Culinary Arts, Career Start, Division of Business, Public Service & Social Sciences
- BOGGS, Lakisha, M.S., Regis University, 2018
Human Resource Services Coordinator, Human Resource Services
- BOLLING, Linda, A.A.S., Pikes Peak Community College, 1993
Library Technician II, Library
- BOLTON, Lance, Ph.D., University of Georgia, 1997
President
- BOND, Vicki, L.P.N., St. Mary's School of Practical Nursing, 1976
Vocational Credentials
Faculty of Medical Office Technology, Division of Medical Sciences
- BOST, Megan
Administrative Assistant III, Facilities & Operations
- BOYD, David, M.MOAS., Air University, 2011
Vocational Credentials
Faculty of Emergency Service Administration, Division of Business, Public Service & Social Sciences
- BRACE, Tobias, M.S.N., Walden University, 2014
Vocational Credentials
Faculty of Nursing, Division of Medical Sciences
- BRADWAY, Landon
General Labor I, Facilities & Operations
- BRATSCHI, Christopher, J.D., Thomas M. Cooley Law School, 1990
Vocational Credentials
Professor of Paralegal, Division of Business, Public Service & Social Sciences
- BREITBEIL, Cristal, M.B.A., University of Colorado, 2006
Vocational Credentials
Faculty of Accounting, Division of Business, Public Service & Social Sciences
- BRENTON, John
Vocational Credentials
Faculty of Automotive Service Technology, Career Start, Division of Communications, Humanities & Technical Studies
- BRINSON, Lorinda
Coordinator of Administrative Services, Advising & Testing
- BROOKS, C.R.J., M.P.A., University of Colorado, 1992
Executive Director of Human Resource Services
- BROWER, John, M.S., University of Arkansas, 1997
Associate Dean, Public Safety, & Human Services, Division of Business, Public Service & Social Sciences
- BROWN, Aaron
Vocational Credentials
Faculty of Diesel Power Mechanics, Division of Communications, Humanities & Technical Studies
- BROWNRIGG, Julie
Administrative Assistant III, High School Programs
- BUCKHORN, Catherine, B.S., University of Phoenix, 2013
Disability Specialist, Accessibility Services
- BUDD, Benjamin
Pipe/Mechanical Trades III, Facilities & Operations
- BULLOCK, Nokedra, M.S., Mississippi University for Women, 2011
COSI Grant Program Specialist Coach, Academic Resources
- BURGESS, Parker
General Labor I, Facilities & Operations
- CABELLO, Andrea
Program Assistant I, Career & Retention Services
- CALLIHAN, Kristy, M.A., Texas Tech University, 1994
Faculty of Humanities, Division of Communications, Humanities & Technical Studies
- CAMPBELL, Majel, M.A., University of Georgia, 2005
Faculty of Spanish, Division of Communications, Humanities & Technical Studies
- CAMPBELL, Rachael, M.A., Antioch University, 1997
Special Assistant to the VPSS, Vice President for Student Services
- CANNAFAX, Tamara, B.A., University of Colorado, 2005
Marketing Project Manager, Marketing & Communication
- CANTU, Antonio
Police Officer I, Campus Police
- CAPEHART, Hermina (Amy)
Lead Teacher, Child Development Center
- CARLSON, Erin
Fixed Asset Accountant, Financial Services
- CARMONA MOLINA, Amner
Coordinator of EAB Early Alert & Navigate Content, Advising & Testing

- CARPENTER, Richard, A.O.S., The Culinary Institute of America, 1985
Vocational Credentials
Assistant Professor of Culinary Arts, Division of Business, Public Service & Social Sciences
- CASADOS, Andrea
Administrative Assistant III, Division of Medical Sciences
- CASH, Charles
Custodian II, Facilities & Operations
- CASTILLO OROZCO, Marisol
Lead Teacher, Child Development Center
- CASTRO, Megan, B.A., Colorado State University, 2012
Coordinator of New Student Orientation, Retention Services
- CATES, David, B.S., University of Northern Colorado, 2003
Vocational Credentials
Faculty of Fire Science, Division of Business, Public Service & Social Sciences
- CHAN, Dianne, M.S., University of Illinois, 1991
Default/Debt Management Advisor, Financial Aid
- CHARFAUROS, Kristina
Administrative Assistant III, Student Life
- CHASE, Lynn, J.D., Chicago Kent College of Law, 1973
Vocational Credentials
Professor of Paralegal, Division of Business, Public Service & Social Sciences
- CHO, Moses
Police Officer I, Campus Police
- CISNEROS, Daniel, B.S., Colorado State University, 2015
Application Developer, Information Technology Support Services
- COELHO, Elizabeth, M.S., San Diego State University, 2008
Faculty of Astronomy, Division of Natural and Physical Sciences
- COKE-CLARK, Lorraine, M.A., University of Phoenix, 2000
Faculty of Advancing Academic Achievement, Division of Math & English
- COLLINS, Stephen, Ph.D., Northwestern University, 2001
Professor of Communication, Division of Communications, Humanities & Technical Studies
- CONRAD, Martin, M.A., University of Colorado, 2009
Assistant Professor of Humanities, Division of Communications, Humanities & Technical Studies
- CORCORAN, Abby, M.S.Ed., University of Kansas, 2009
Assistant Director of Instructional Support for Perkins, Instructional Support
- CORDOVA, Margaret, M.A., University of Colorado, 2004
Faculty of English as a Second Language, Division of Math & English
- CORN, Leland, A.A.S., Pikes Peak Community College, 1996
Vocational Credentials
Faculty of Welding, Career Start, Division of Communications, Humanities & Technical Studies
- CORNELIUS, Belenda, M.A., University of Colorado, 1992
Counseling & Human Services Certification
Recruitment & Admissions Specialist, Admissions, Recruitment & Enrollment Services
- CORNISH, Amy, M.A., Colorado State University, 2000
Faculty of French, Division of Communications, Humanities & Technical Studies
- COSTANDINE, Nadine, M.S.N., University of Texas, 2017
Nursing Simulation Lab Coordinator, Division of Medical Sciences
- COWARD, Vendetta
Custodian I, Facilities & Operations
- CRAWFORD, Herman, Ed. D., Capella University, 2017
Vocational Credentials
Faculty of Hospitality, Division of Business, Public Service, and Social Science
- CRUZ, Kenda, A.A.S., Pikes Peak Community College, 2018
AHA Training Center Coordinator, Division of Natural and Physical Sciences
- CUNNINGHAM, Casey
Structural Trades III, Facilities & Operations
- CUSHMAN, Ann, Ph.D., Colorado State University, 2001
Professor of Mathematics, Division of Math & English
- DAMPHOUSSE, Donna, B.A., Regis University, 2010
Vocational Credentials
Faculty of Dental Assisting, Division of Medical Sciences
- DAVIDSON, Folleyemisi
Enrollment and Advising Remote Services Specialist, Vice President of Student Services
- DAVIES, Benjamin, M.F.A., Ohio University, 2000
Associate Dean of Humanities, Division of Communications, Humanities & Technical Studies
- DAVIES, Lorelle, M.B.A., Colorado Technical University, 2007
Director of Auxiliary Services
- DAVIS, Cynthia, B.A., Point Loma Nazarene University, 1991
Coordinator of the Child Development Center, Child Development Center
- DAY, Kimberly G., A.A.S., Pikes Peak Community College, 1997
IT Technician, Information Technology Support Services
- DECAMBRA, Candise
Lead Teacher, Child Development Center
- DECECCO, Paul, M.A., University of New Mexico, 1998
Director, Military & Veterans Programs
- DECH, Debra, A.A., Pikes Peak Community College, 2006
Administrative Assistant III, Admissions, Recruitment & Enrollment Services
- DEHERRERA, James, M.S.Ed., Northern Illinois University, 2000
Vocational Credentials
Faculty of Computer Science, Division of Business, Public Service & Social Sciences
- DEHERRERA, Laurel, M.S., Northern Illinois University, 1994
Professor of Mathematics, Division of Math & English
- DEITSCH, Eileen, M.S., Pace University, 1993
Vocational Credentials
Faculty of Nursing, Division of Medical Sciences
- DENNIS, Scott, B.A., University of Denver, 1995
Program Advisor, Advising & Testing
- DESPAIN, Heather
Program Assistant I, Military & Veterans Programs

- DEVAUX, Jason, J.D., Washington & Lee University, 1998
Vocational Credentials
Professor of Criminal Justice, Division of Business, Public Service & Social Sciences
- DEWALD, Marian
Accounting Technician III, Financial Services
- DEWALL, Jeremy
EMS Medical Director, Division of Medical Sciences
- DIAS, Elsa, Ph.D., Purdue University, 2004
Professor of Political Science, Division of Business, Public Service & Social Sciences
- DIAS, Jason, Psy.D., University of the Rockies, 2010
Assistant Professor of Psychology, Division of Business, Public Service & Social Sciences
- DIAWARA, Patricia, Ph.D., University of Lorraine, 1999
Executive Director of Institutional Effectiveness
- DIXON, Donnell
Custodian I, Facilities & Operations
- DOLAN, Noel, B.A., Colorado State University, 2003
Art & Graphic Design Coordinator, Marketing & Communication
- DOUGHERTY, Ruth
Teacher, Child Development Center
- DRONE, Sandy
Teacher, Child Development Center
- DUNCAN, Carrie, A.A.S., Portland Community College, 2009
Assistant Coordinator, Child Development Center
- DUNN, Steven
Course Materials Manager, Bookstore
- DUTTON, Ashlee, M.P.A., Capella University, 2012
Manager of Development and Leadership Advancement, Human Resource Services
- ECKELBERRY, Robin, M.S., Colorado State University, 2015
Access Specialist, Accessibility Services
- EDIE-KORLESKI, Montserrat, Ph. D., University of North Texas, 2004
Dean of Medical Sciences, Division of Medical Sciences
- EGNOR, Jeffrey
Police Officer I, Campus Police
- EIFERD, Richard
Structural Trades II, Facilities & Operations
- ELLIS, Carl
Manager of Audio Visual Services, Information Technology Support Services
- ELTHORP, Michele A., A.S., Pikes Peak Community College, 1997
Assistant Coordinator - CDC, Child Development Center
- ELWAYS, Justin, M.A., University of Colorado, 2016
Program Advisor, Advising & Testing
- EMERY, Katherine, M.S.N., Vanderbilt University, 2011
Vocational Credentials
Faculty of Nursing, Division of Medical Sciences
- EPSTEIN, Warren, B.A., University of South Florida, 1982
Executive Director of Marketing & Communication
- ERICKSON, Eric, M.A., Southern New Hampshire University, 2014
Faculty of English, Division of Math & English
- ESPINOSA, Jose
Custodian I, Facilities & Operations
- ESPINOSA, Tony
Grounds & Nursery I, Facilities & Operations
- ETTLEMAN, Keragan, B.A., Colorado State University, 2018
Assistant to the Vice President, Vice President for Instructional Services
- EVANS, Misty
Program Advisor, Advising & Testing
- EVERETT, Jami, A.G.S., Pikes Peak Community College, 2013
Network Operations Manager, Information Technology Support Services
- EWING, Kevin, M.S., University of Colorado, 2013
Faculty of Mathematics, Division of Math & English
- FALLDORF, Peter, M.A., Hofstra University, 1986
Assistant Professor of Biology, Division of Natural and Physical Sciences
- FARMER, Rose
IT Service Desk Specialist, Information Technology Support Services
- FARRAR, Shae L., B.A., Regis University, 2005
Assistant Director of Budget Services, Business Services
- FERRIS, Priscilla
Administrative Assistant III, Division of Math & English
- FILIPIAK, Amy, M.P.A., University of Colorado, 2009
Associate Professor Faculty of Geography, Division of Natural and Physical Sciences
- FLYNN, William
Technician III, Military & Veterans Programs
- FORAND, Emily, M.A., New Mexico State University, 2006
Assistant Professor of English, Division of Math & English
- FORSETH, Carol, M.A., Colorado State University, 1990
Assistant Professor of English, Division of Math & English
- FOSTER, Rick, Ph.D., University of Colorado, 1996
Faculty of Political Science, Division of Business, Public Service & Social Sciences
- FRANCK, Stefenie, A.A.S., Pikes Peak Community College, 2011
Vocational Credentials
Faculty of Interior Design, Division of Communications, Humanities & Technical Studies
- FRANCO, Alejandro, M.S., Colorado Technical University, 2020
Network Analyst, Information Technology Support Services
- FRANKMORE, David
Vocational Credentials
Faculty of Carpentry & Construction, Division of Communications, Humanities & Technical Studies
- FRASER-MILLS, Michelle, B.S., Colorado State University, 1987
Director of Financial Services/Controller
- FRAZIER, Christopher
Custodian I, Facilities & Operations
- FRAZIER, Steve
Custodian I, Facilities & Operations
- FREDRICKSEN, Robert, B.S., Virginia Technical College, 2015
Instructional Technologist, eLearning

- FROST, April, M.A., University of Arizona, 2007
Vocational Credentials
Faculty of Cyber Security, Division of Business, Public Service & Social Sciences
- FULLER, Erica
Administrative Assistant III, Admissions, Recruitment & Enrollment Services
- GACCETTA-SHARP, Christine, B.S., Fort Hays State University, 2019
Vocational Credentials
Culinary Arts Lab Coordinator, Division of Business, Public Service & Social Sciences
- GAGNON, Catherine, M.S.N., University of Phoenix, 2000
Vocational Credentials
Professor of Nursing, Division of Medical Sciences
- GAITERS-JORDAN, Jacquelyn, M.A., University of Colorado, 2005
Associate Vice President for Academic Resources, Instructional Services
- GALLEGOS, Lonnie
Custodian II, Facilities & Operations
- GALLEGOS-PARDO, Benjamin
Coordinator of Multicultural Student Retention Initiatives, Diversity, Equity, and Inclusion
- GARBERT, Mary
General Labor I, Facilities & Operations
- GARCIA, Amanda
Laboratory Technology I, Division of Medical Sciences
- GARCIA, Sylvia, B.A., University of Denver, 1974
Director of Retention Services
- GARRETT, Barbara, Ed.D., Nova Southeastern University, 2006
Assistant Professor of Advancing Academic Achievement, Division of Math & English
- GARRETT, Julie
Police Officer I, Campus Police
- GENSCHORCK, Laura A., A.G.S., Pikes Peak Community College, 1995
Human Resources Specialist II, Human Resource Services
- GERING, Carolyn, A.A.S., Pikes Peak Community College, 2015
Lead Teacher, Child Development Center
- GERTH, Carolynn, A.A.S., Pikes Peak Community College, 2003
Accounting Technician III, Procurement
- GHRAYYEB, Souad
Teacher, Child Development Center
- GILCHRIST, Robert, B.S., University of Pennsylvania, 1986
Professor of Physics, Division of Natural and Physical Sciences
- GILES, Billie Jo, M.A., University of North Florida, 2016
Assistant Professor of English, Division of Math & English
- GILLESPIE, Tia, B.A., University of Colorado, 2018
Testing & Entrance Advising Specialist, Advising & Testing
- GONZALES, Karyn
Laboratory Technology I, Division of Medical Sciences
- GORMAN, Taylor, M.F.A., Wichita State University, 2016
Library Technician II, Library
- GOROSKI, Sara, M.L.S., Emporia State University, 2003
Reference & Instruction Librarian, Library
- GOYA, Kourtney
Assistant Director of Concurrent Enrollment, High School Programs
- GRACE, Gayle, B.Mus., Friends University, 1974
Assistant Professor of Music, Division of Communications, Humanities & Technical Studies
- GREEN, Shonda, M.NPM., Regis University, 2014
Assistant to the Associate Vice President for Strategic Partnerships, High School Programs & Workforce Development
- GREENE, Ernest, D.M., Colorado Technical University, 2010
Vocational Credentials
Faculty of Cyber Security and Computer Networking, Division of Business, Public Service & Social Sciences
- GREGG, Donna
Administrative Assistant III, eLearning
- GREGORY, Dana, M.P.H., George Washington University, 2020
Faculty of Physical Therapy Assistant, Division of Medical Sciences
- GRIPPO, Steven, B.A., University of Colorado, 2007
Instructional Coordinator of Medical Sciences, Division of Medical Sciences
- GRODMAN, Jacob
Administrative Assistant III, Division of Medical Sciences
- GRUBB, Jennifer, B.A., University of Notre Dame, 2001
Mental Health Counselor, Counseling Center
- GRUSING, Barbara, A.A., Pikes Peak Community College, 1992
Payroll Manager, Financial Services
- GRUSZKOWSKI, April (Renee), B.A., George Mason University, 2009
Application Developer, Information Technology Support Services
- GUTIERREZ LOPEZ, Fabiola, M.A., Cal Poly, 2016
Program Advisor, Advising & Testing
- GUTSCHICK, James, B.A., Hastings College, 1999
Vocational Credentials
Faculty of Fire Science, Division of Business, Public Service & Social Sciences
- GUY, Andre
Program Specialist Coach, Academic Resources
- HADDON, Greg, A.A., Los Angeles Community College District, 1984
Vocational Credentials
Faculty of Architecture & Construction Technology, Division of Communications, Humanities & Technical Studies
- HALVORSEN, Kjersten, M.A., Colorado Christian University, 2009
Assistant Professor of Psychology, Division of Business, Public Service & Social Sciences
- HAMILL, Kevin
Police Officer I, Campus Police
- HANS, Ashleigh
Administrative Assistant III, Records
- HARDY, Tiko, LSW, Psy.D., University of the Rockies, 2014
Vocational Credentials
Assistant Professor of Psychology & Social Work, Division of Business, Public Service & Social Sciences

- HARRIS, Chelsy, M.Ed., Xavier University, 2005
Associate Vice President for Strategic Partnerships, Vice President for Instructional Services
- HARRIS, Hayley
Lead Teacher, Child Development Center
- HARRIS, Yolanda, M.A., University of Northern Colorado, 2003
Director of Counseling Center
- HARVEY, Sandi, M.A., Wichita State University, 2010
Assistant Professor of Anthropology, Division of Business, Public Service & Social Sciences
- HASTINGS, Robert
Accounting Specialist, Financial Services
- HAYNES, Dawna, Ed.D., Creighton University, 2016
Associate Vice President, Vice President for Student Services
- HAZEL-DESTEFANO, Jeannie, A.A.S., Pikes Peak Community College, 1998
Vocational Credentials
Program Assistant I, Accessibility Services
- HEMESATH, Michael, A.G.S., Pikes Peak Community College, 1999
IT Technician II, Information Technology Support Services
- HENNESSY, Kim, J.D., University of Cincinnati, 1977
Assistant Director of Human Resource Services
- HENRICHS, Cathy, M.A., University of Connecticut, 1981
Professor of Literature, Division of Math & English
- HENSELMAN, Joneila, B.S., University of Central Missouri, 1988
CCAMPIS Coordinator, Child Development Center
- HERNANDEZ, Ernesto, M.S., Colorado State University, 1992
Faculty of Biology, Division of Natural and Physical Sciences
- HERRERA, Christopher
Grounds & Nursery I, Facilities & Operations
- HETRICK, Frances, Ed.D., University of Arkansas, 2011
Dean, Communications, Humanities & Technical Studies
- HETZLER, Stuart
Assistant Store Manager, Bookstore
- HILL, Carla
Administrative Assistant III, Records
- HILL, Tamika
Payroll Specialist, Financial Services
- HILLYER, Audrey, M.A., DePaul University, 2004
Associate Dean of English, Division of Math & English
- HINO, Gary, A.A.S., Pikes Peak Community College, 2007
Vocational Credentials
Faculty of Culinary Arts, Division of Business, Public Service & Social Sciences
- HODGE, Michele, M.B.A., University of Colorado, 2015
HR Manager, Human Resource Services
- HOGG, Sharon, B.S., Slippery Rock University, 1978
Vocational Credentials
Associate Dean of Fine Arts & CTE, Division of Communications, Humanities & Technical Studies
- HOLECKOVA, Iveta, M.S., Utica College, 2005
Vocational Credentials
Faculty of Computer Science, Division of Business, Public Service & Social Sciences
- HOLMES, Jennifer, M.S., University of Colorado, 2010
Assistant Professor of Mathematics, Division of Math & English
- HOLMES, Jill, B.S., Texas A & M, 2004
Testing and Entrance Advising Specialist, Advising and Testing
- HOLMES MOTTERLE, Susi
Administrative Assistant II, Facilities & Operations
- HOPPER, Jennifer, M.A., New Mexico State University, 1995
Director of Child Care Services
- HOPPER, Tarasa
Administrative Assistant III, Library
- HORTON, Gary, M.S.C.J.A., Columbia Southern University, 2017
Vocational Credentials
Assistant Professor of Law Enforcement Services, Division of Business, Public Service & Social Sciences
- HOWELL, Dionne, M.F.A., School of the Art Institute of Chicago, 2008
Assistant Professor of English, Division of Math & English
- HUDGENS, Kevin, M.P.A., University of Colorado, 2015
Director of Admissions, Admissions, Recruitment and Enrollment Services
- HUDSON, Robert, M.A., Ashford University, 2014
Vocational Credentials
Dean, Business, Public Service & Social Sciences
- HUGHES, Ernest, M.B.A., Colorado Technical University, 2016
Computer Assisted Instruction Lab Coordinator, Information Technology Support Services
- HULL, Misty, M.A., Colorado Christian University, 2001
Professor of Psychology, Division of Business, Public Service & Social Sciences
- HUMPHREY, Michael
Student Services Specialist II, Financial Aid
- HUMPHREY, Twila, B.G.S., Fort Hays State University, 2011
Registrar and Coordinator of Records, Records
- HURNEY, Jack, A.A.S., Community College of Denver, 2004
Client Services Manager, Information Technology Support Services
- HURRELL, Dennis
Materials Handler III, Bookstore
- HURRELL, Rockie
Director of Procurement
- HUSS, Susan
Administrative Assistant III, Advising & Testing
- HYDE, ReeAnn, M.A., Fuller Theological Seminary, 1997
Instructional Liaison, Advising & Testing
- IZOLD, Colleen
Administrative Assistant II, Advising & Testing
- IZOLD, Mark, M.S., Ohio State University, 1993
Professor of Geology, Division of Natural and Physical Sciences
- JACKSON, Bryanna
Teacher, Child Development Center
- JACKSON, Ilah, B.S., University of New Mexico, 2000
Vocational Credentials
Faculty of Interpreter Prep Program, Division of Communications, Humanities & Technical Studies
- JACOBSON, Chad, A.A.S., Pikes Peak Community College, 2006
Sales Manager I, Bookstore

- JAMES, Kemisha, B.A., San Jose State University, 2010
Enrollment and Advising Remote Services Specialist, Vice
President of Student Services
- JAMES, Lisa, M.A., University of Wisconsin, 1986
Executive Director, Foundation
- JAMES, Roy
Custodian I, Facilities & Operations
- JANOS, Marcia, B.S., Oakland University, 1989
Vocational Credentials
Faculty of Pharmacy Technician, Division of Medical Sciences
- JARAMILLO, Larry
Materials Handler I, Division of Communications, Humanities
& Technical Studies
- JIMENEZ, Davina
Student Services Specialist II, Financial Aid
- JOHNSON, Christine
Clinical Coordinator, Division of Medical Sciences
- JOHNSON, Jemina
Teacher, Child Development Center
- JOHNSON, Kendra
Administrative Assistant III, Records
- JOHNSON, Kristen, M.S.Ed., Purdue University, 2003
Dean, Division of Natural and Physical Sciences
- JOHNSON, Kristofor, B.A., University of Colorado, 2001
Vocational Credentials
Faculty of Fire Science, Division of Business, Public Service &
Social Sciences
- JOHNSON, Mark
Police Officer III, Campus Police
- JOHNSON, Rhonda, M.B.A., University of Phoenix, 2010
Assistant Director, Financial Aid for Compliance & Fraud,
Financial Aid
- JOHNSON-AKSE, Theresa, M.S., Western Governors University,
2020
Vocational Credentials
Assistant Professor of Computer Networking, Division of
Business, Public Service & Social Sciences
- JOLES, Jeffery, M. Sc. Eng., University of Michigan, 1995
Associate Dean of Mathematics, Division of Math & English
- JONAS-MORRISON, Carol, M.S., New Mexico Institute of Mining &
Technology, 1993
Professor of Mathematics, Division of Math & English
- JONES, Catherine (Cici), A.A.S., Pikes Peak Community College,
2008
Student Services Specialist II, Financial Aid
- JONES, Robert Brian
Audio Visual Systems Analyst, Information Technology
Support Services
- JORDAN, Althea, Ph. D., Northcentral University, 2016
Vocational Credentials
Faculty of Early Childhood Education, Division of Business,
Public Service, and Social Science
- KAMILAR, Cindy, Ph.D., University of Miami, 1993
Professor of Psychology, Division of Business, Public Service
& Social Sciences
- KEEL, Kathie
Learning Specialist, TRIO Student Support Services
- KELLEY, Alfrado
Custodian I, Facilities & Operations
- KEO, Paneth
Custodian I, Facilities & Operations
- KILGORE, Doyle
Police Officer I, Campus Police
- KING, Mark, M.A., New Mexico State University, 1998
Professor of English, Division of Math & English
- KIRKLAND, Kimberly
Vocational Credentials
Faculty of Medical Office Technology, Division of Medical
Sciences
- KITONSA, Sarah, M.B.A., University of Denver, 2013
Foundation Scholarship Coordinator/Ombuds,
Foundation/VPSS
- KNIGHT, Dana
Administrative Assistant III, Division of Business, Public
Service & Social Sciences
- KNUDTZON, Jessica, B.A., University of California, 2010
Assistant Director of Foundation, Foundation
- KOBES-NEWCOMB, Stephanie, M.F.A., University of Colorado,
2010
Faculty of Dance, Division of Communications, Humanities &
Technical Studies
- KOLTUN, Brook, M.S., Colorado State University, 2016
Assistant Director of Advising & Testing, Advising & Testing
- KOSKI, Christine
Teacher, Child Development Center
- KOSTER, Michele, A.A.S., Pikes Peak Community College, 2005
Vocational Credentials
Faculty of Computer Aided Drafting-Mechanical, Division of
Communications, Humanities & Technical Studies
- KOVALY, Karen, B.A., University of Connecticut, 1986
Communications Coordinator, Marketing & Communication
- KRUGER, Cecilia, A.A.S., Pikes Peak Community College, 2003
Administrative Assistant III, Division of Math & English
- KUMAR, Sanjay, A.G.S., Pikes Peak Community College, 2018
IT Support Specialist, Information Technology Support
Services
- KURKOWSKI, Carol, Ph.D., Northcentral University, 2016
Vocational Credentials
Faculty of Business, Division of Business, Public Service &
Social Sciences
- LABATE, Fabrizio, M.S., Colorado Technical University, 2013
Assistant Chief Technology Officer, Information Technology
Support Services
- LABRECQUE, Catherine, M.S., Regis University, 2009
Vocational Credentials
Director of Law Enforcement Academy, Division of Business,
Public Service & Social Sciences
- LACLAY, Emmett
Custodian I, Facilities & Operations
- LAGLE, Richard
Pipe/Mechanical Trades II, Facilities & Operations
- LAKIN, Danielle, B.S.N., Regis University, 2017
Vocational Credentials
Faculty of Nursing Assistant, Division of Medical Sciences

- LANDWEHR, Jillian
Teacher, Child Development Center
- LANGAN, Lynn, A.A.S., Pikes Peak Community College, 1992
Accounting Technician III, Financial Services
- LAREZ, Christine
Program Assistant I, Division of Nursing
- LARISH, Ruth-Ann, M.A.T., Colorado College, 2001
Vocational Credentials
Professor of Natural Resources, Division of Natural and Physical Sciences
- LARROQUETTE, Linda S., A.G.S., Pikes Peak Community College, 1995
Program Assistant I, Child Development Center
- LAWRENCE, Shanutel
Administrative Assistant II, Division of Math & English
- LAWTON, David, M.S., National Defense University, 1998
Associate Professor of Mathematics, Division of Math & English
- LEATHES, Jennifer, M.B.A., University of Phoenix, 2005
Recruitment & Admissions Specialist, Admissions, Recruitment & Enrollment Services
- LEBSOCK, Zachary, M.A., University of Colorado, 2017
Coordinator of Student Recruitment, Admissions, Recruitment & Enrollment Services
- LEE, Tracy, M.S., University of Nebraska, 2014
Faculty of Biology, Division of Natural and Physical Sciences
- LEE, Travis, A.A.S., Pikes Peak Community College, 2009
Vocational Credentials
Faculty of Welding, Career Start, Division of Communications, Humanities & Technical Studies
- LEHMAN, Carley, M.S., University of Texas, 1982
Vocational Credentials
Faculty of Emergency Medical Services, Division of Medical Sciences
- LEMA, Melissa, M.S., Northern Arizona University, 2001
Vocational Credentials
Associate Professor of Biology, Division of Natural and Physical Sciences
- LEONIS, Marlene
Administrative Assistant II, Division of Communications, Humanities, and Technical Studies
- LEWIS, Regina, M.A., University of Colorado, 2001
Professor of Communication, Division of Communications, Humanities & Technical Studies
- LICHT, Deborah, Ph.D., Harvard University, 2001
Professor of Psychology, Division of Business, Public Service & Social Sciences
- LIKINS, Andrew R., M.A., Azusa Pacific University, 2002
Associate Professor of English as a Second Language, Division of Math & English
- LIKINS, Heidi, M.S.N., Grand Canyon University, 2018
Vocational Credentials
Faculty of Nursing, Division of Medical Sciences
- LIONEL, William, B.A., University of California, 1992
Success Coach, Retention Services
- LIPPINCOTT, Amber, M.S.N., Walden University, 2015
Vocational Credentials
Associate Dean of Nursing, Division of Medical Sciences
- LOGUE, Joshua
IT Service Desk Specialist, Information Technology Support Services
- LONG, Christine (Betty), M.B.A., Western Governor's University, 2016
Manager of Student Accounts, Financial Services
- LONG, Stephanie, B.S., Colorado Technical University, 2013
Assistant to the Dean, Division of Academic Resources & Services
- LOPEZ, Leona, Ph.D., University of Colorado, 2016
Program Manager, Military & Veterans Programs
- LOVEJOY, McKenna, Ph.D., University of Colorado, 2017
Faculty of Mathematics, Division of Math & English
- LOWDEN, Brandan, M.S., Kansas State University, 2012
Instructional Liaison, Advising & Testing
- MADSEN, Jenny
Student Services Specialist II, Financial Aid
- MADSON, Michael, M.S., Mississippi State University, 2000
Associate Dean of Natural & Physical Sciences, Division of Natural and Physical Sciences
- MAHAN, Shawna, M.S., University of Colorado, 1995
Professor of Mathematics, Division of Math & English
- MALCOLM, Daniel, M. Arch., Texas A & M University, 1966
Project Manager, Facilities & Operations
- MALONE, William, M.Mus., New England Conservatory of Music, 1980
Professor of Music, Division of Communications, Humanities & Technical Studies
- MALUIA, Vaalele
Police Officer I, Campus Police
- MANNERING, Julie, M.S., University of Phoenix, 1999
Vocational Credentials
Associate Professor of Computer Information Systems, Division of Business, Public Service & Social Sciences
- MANNERING, Scott, A.A.S., Pikes Peak Community College, 1998
Vocational Credentials
Faculty of Welding, Division of Communications, Humanities & Technical Studies
- MANNING, Ann-Marie, LSW, M.S.W., Colorado State University, 2001
Vocational Credentials
Assistant Professor of Social Work, Division of Business, Public Service & Social Sciences
- MANNINO, Ollie, M.S., Memphis State University, 1980
Director of Corporate & Workforce Training, High School Programs
- MAREAN, Amber, Ph.D., University of Colorado, 2012
Faculty of Biology, Division of Natural and Physical Sciences
- MARIK, James, M.S. for Teachers, Pace University, 2014
Disability Specialist, Accessibility Services
- MARTIN, Kendra, A.A.S., Pikes Peak Community College, 1995
Assistant Coordinator, Child Development Center
- MARTIN, Paul, A.A.S., Pikes Peak Community College, 2001
IT Technician II, Information Technology Support Services
- MARTINEAU, Darcy
AV Systems Analyst, Information Technology Support Services

- MARTINEZ, Jessica
Accounting Technician III, Financial Services
- MARTINEZ, Ronald
Police Officer I, Campus Police
- MARTINEZ, Tierra
Faculty Pay & Training Coordinator, Instructional Support
- MARTINEZ MERCIER, Gabriela, M.L.S., Emporia State University, 2015
Reference & Instruction Librarian, Library
- MARVE, Anita, M.S., Walden University, 2016
Lead Teacher, Child Development Center
- MASON, Victoria
Administrative Assistant II, High School Programs & Workforce Development
- MATHER, Ty, B.S., Grand Canyon University, 2009
Vocational Credentials
Assistant Professor of Fire Science, Division of Business, Public Service & Social Sciences
- MATTHEWS, Adam, B.S., Ithaca College, 1998
Vocational Credentials
Faculty of Radio & Television, Career Start, Division of Communications, Humanities & Technical Studies
- MAZZA, Timothy
Administrative Assistant II, Division of Natural and Physical Sciences
- MCALPINE, Kenneth
Vocational Credentials
Faculty of Criminal Justice, Career Start
- MCCLAIN, Jared, M.Env., Western State Colorado University, 2017
Vocational Credentials
Faculty of Outdoor Leadership Recreation, Division of Natural and Physical Sciences
- MCCLUGGAGE, Bruce, M.A., Fuller Theological Seminary, 2005
Faculty of Philosophy, Division of Communications, Humanities & Technical Studies
- McCULLOUGH, Michael, B.S., Regis University, 2000
Asset Management & Software Compliance Coordinator, Information Technology Support Services
- MCCURLEY, Kimberly
Dining Services III, Child Development Center
- MCDADE, Timothy
Structural Trades I, Facilities & Operations
- MCLEAN, Cheryl, B.S., University of California, 1988
Assistant to the Dean of Math & English, Division of Math & English
- MCMAHON, Sarah, M.Hum., University of Colorado, 2013
Faculty of English, Division of Math & English
- MCNAMEE, Hannah, B.A., University of Wyoming, 2010
Student Services Communication Coordinator, Admissions, Recruitment & Enrollment Services
- MCPHERSON, Sharon, M.A., California State University, 1994
Assistant Professor of Mathematics, Division of Math & English
- MCUMBER, Evy, Ph.D., Clemson University, 2013
Faculty of Chemistry, Division of Natural and Physical Sciences
- MEHLHOSE, Greg, B.S., University of Missouri, 1999
IT Systems Manager, Information Technology Support Services
- MERCADO, Rick, A.A.S., Helena College of Technology, 1996
Vocational Credentials
Faculty of Automotive Services, Division of Communications, Humanities & Technical Studies
- MERCADO, Steven
IT Support Specialist, Information Technology Support Services
- MERSON, Michael, M.C.R.J., University of Colorado, 2010
Vocational Credentials
Faculty of Criminal Justice, Division of Business, Public Service & Social Sciences
- MESA, Maria, M.Ed., Chaminade University, 2006
Director of Accessibility Services/CAC
- MIELKE, Alyse, A.S., Kaplan University, 2011
Accounting Technician III, Financial Services
- MILLER, Joseph, DScPT, Baylor University, 2011
Vocational Credentials
Faculty of Physical Therapy Assistant, Division of Medical Sciences
- MILLER, Julie, A.G.S., Pikes Peak Community College, 1991
Administrative Assistant III, Records
- MILLER, Sylva, M.S., University of Utah, 2001
Professor of English, Division of Math & English
- MILLS, Ralph
Vocational Credentials
Faculty of Automotive Collision Technology, Division of Communications, Humanities & Technical Studies
- MITCHELL, Marcellus
Custodian I, Facilities & Operations
- MOBOLADE, Abbey, M.S., Western Governors University, 2016
Vocational Credentials
Assistant Professor of Nursing, Division of Medical Sciences
- MONTANO, Elizabeth, B.A., Colorado College, 2015
Program Advisor, Advising & Testing
- MOORE, Charles, M.M.A.S., Air University, 2011
Associate Dean of Business, Public Service & Social Science, Division of Business, Public Service & Social Sciences
- MOORE, Nichole, M.S.N., Colorado State University, 2005
Vocational Credentials
Professor Faculty, Division of Medical Sciences
- MOORE-ALLEN, Selinea
Academic Resources Specialist, Academic Resources
- MORALES, Yolanda
Custodian I, Facilities & Operations
- MORRIS, Kenneth, M.P.A., University of Colorado, 1992
Vocational Credentials
Professor of Criminal Justice, Division of Business, Public Service & Social Sciences
- MORRISON, Jennifer, M.S., Troy University, 2002
Enrollment Services Manager, Admissions, Recruitment & Enrollment Services
- MOSS, Kristina, M.S., Regis University, 2012
Assistant Director FA for Customer Services & Technology, Financial Aid

- MOUNT, Ashley, M.Ed., University of California, 2011
Procurement Agent, Procurement
- MULLANE, Laura, B.S., University of North Georgia, 2008
Project Director of TriO Student Support Services
- MULLINS, Charles, A.A.S., Pikes Peak Community College, 2017
Accounts Payable Specialist, Financial Services
- MUNICK, Warren, M.A., Miami University, 1975
Assistant Professor of Economics, Division of Business,
Public Service & Social Sciences
- MUNSELLE, Nova, M.A., Adler School of Professional Psychology,
2014
Instructional Liaison, Advising & Testing
- MURPHY, Alysia, B.A., Metropolitan State University, 2016
Financial Aid Advisor, Financial Aid
- MURPHY, Douglas, M.S., Troy University, 2009
Director of Simulation Center, Division of Medical Sciences
- MYERS, Hettie, M.A., University of Colorado, 2013
Assistant to the Dean, Division of Communications,
Humanities & Technical Studies
- NASH, Marc, M.S., Fort Hays State University, 2012
Course Designer, Accessibility Services/Universal Design
Specialist, eLearning
- NASH, Mark, B.S.Ed., Emporia Kansas State College, 1976
Capital Project Manager, Facilities & Operations
- NATALI, Dennis, Ph.D., Colorado State University, 2014
Vocational Credentials
Professor of Business, Division of Business, Public Service &
Social Sciences
- NAVARRO, Beatriz, M.A., Colorado Christian University, 2015
COSI Grant Program Specialist Coach, Academic Resources
- NELSON, Melissa, M.B.A., Loyola Marymount University, 1999
Vocational Credentials
Associate Professor of Accounting, Division of Business,
Public Service & Social Sciences
- NEPPL, Kaeley, B.S.Ed., University of Nebraska, 2006
Testing & Entrance Advising Specialist, Advising & Testing
- NEWCOMB, Valerie, J.D., Case Western Reserve University, 2008
Civil Rights/HRS Investigator, Human Resource Services
- NEWCOMB, William
Operations Manager, Military & Veterans Programs
- NEWMAN, Hannah, M.S., Georgia Southern University, 2019
Business Intelligence Analyst, Institutional Effectiveness
- NGO, Van
Administrative Assistant II, Human Resource Services
- NIKOLAI, Gloria, M.A., University of Colorado, 1992
Professor of Sociology, Division of Business, Public Service &
Social Sciences
- NOBLE, Chad, M.A., University of Colorado, 2018
Program Advisor, Advising & Testing
- NOVACK, Monica, M.S., University of Colorado, 1992
Vocational Credentials
Assistant Professor of Computer Information Systems,
Division of Business, Public Service & Social Sciences
- NYLANDER, Tor, B.A., University of Colorado, 2010
Coordinator of Accommodative Testing, Accessibility Services
- NYMAN, Randee, M.S.N., Dominican University of California, 2003
Vocational Credentials
Assistant Professor of Nursing, Division of Medical Sciences
- OAKES, John, A.O.S., Technical Trades Institute, 1986
Vocational Credentials
Faculty of Heating, Air Conditioning & Refrigeration, Division
of Communications, Humanities & Technical Studies
- O'BRIEN, Alex, A.A.S., Pikes Peak Community College, 2015
Vocational Credentials
Faculty of Zoo Keeping, Division of Natural and Physical
Sciences
- OGNIBENE, John, A.A.S., Sullivan Community College, 2013
Administrative Assistant III, Learning Commons
- OLAGUE-JAMAICA, Maricela
Recruitment and Admissions Specialist, Admissions,
Recruitment and Enrollment Services
- ORTIZ, Melissa
Teacher, Child Development Center
- OSWALD, Celeste
Teacher, Child Development Center
- OSWANDEL, David, M.S., University of Colorado, 2018
Faculty of Biology, Division of Natural and Physical Sciences
- OUBRE, Chelsea
Administrative Assistant II, Advising & Testing
- OVERGAARD, Barbara, M.A., William Carey International
University, 1984
Assistant Professor of Advancing Academic Achievement,
Division of Math & English
- OWEN, Ashley, B.A., University of Colorado, 2016
Transition Specialist, TRIO Student Support Services
- OWEN, Carolyn
Recreation and Wellness Coordinator, Student Life
- PADEWAY, Patricia, M.H.R.M., Colorado State University, 2019
Talent Acquisition Manager, Human Resource Services
- PAGEL, T. Kate, Ph.D., University of Colorado, 2009
Professor of Humanities, Division of Communications,
Humanities & Technical Studies
- PALARINO, Deborah, M.S., University of Arkansas, 1990
Vocational Credentials
Associate Professor of Early Childhood Education, Division of
Business, Public Service & Social Sciences
- PALMA, Barbara
Administrative Assistant III, Records
- PARADISO, Michael, A.A.S., Pikes Peak Community College, 2012
Vocational Credentials
Faculty of Culinary Arts, Division of Business, Public Service &
Social Sciences
- PARCHA, Michael, M.A., Eastern Michigan University, 1990
Professor of Mathematics, Division of Math & English
- PARENT, Cyrille, M.A., University of Paris, 1995
Chief Technology Officer, Information Technology Support
Services
- PARKER, Carol A., A.A.S., Pikes Peak Community College, 2003
Vocational Credentials
Lab Coordinator I, Accessibility Services
- PARKER, Carol J., M.L.A., Fort Hays State University, 2011
Assistant Professor of English, Division of Math & English

- PARRISH, Renee, B.A., Regis University, 2013
IT Budget Finance Data Analyst, Information Technology Support Services
- PAULEY, Stephanie, B.S., Colorado State University, 1997
Laboratory Coordinator II, Division of Natural and Physical Sciences
- PEEBLES, Christine, J.D., University of San Diego School of Law, 1999
Faculty of Philosophy, Division of Communications, Humanities & Technical Studies
- PEMBERTON, Victoria
Administrative Assistant III, Instructional Support
- PEREZ, Ricardo, B.S., Johnson & Wales University, 2005
Director of Student Life, Student Life
- PEREZ, Sabrina, B.S., University of Phoenix, 2010
Vocational Credentials
Faculty of Dental Assisting, Division of Medical Sciences
- PERRY, Jeffrey R., A.A.S., Central New Mexico Community College, 2006
Application Support Analyst, Information Technology Support Services
- PETERS, Bridget, M.A., University of New Orleans, 2017
Director of Grants Development & Compliance, Vice President of Administrative Services
- PETERS, Pamela, Ph.D., Colorado State University, 2007
Professor of Mathematics, Division of Math & English
- PETERSON, Michael
Vocational Credentials
Police Officer I, Campus Police
- PETROSS, Jennifer
Administrative Assistant III, eLearning
- PETRUCCI, John
Pipe/Mechanics Trades II, Facilities & Operations
- PHARR, Zachary, M.S., University of Central Arkansas, 2010
Data Research Analyst, Instructional Effectiveness
- PIERCE, C. Dallas, M.B.A., Liberty University, 2006
Vocational Credentials
Associate Dean of Business & Technology, Division of Business, Public Service & Social Sciences
- PILUSO, Rodolfo
Custodian II, Facilities & Operations
- PINELL, Mara, B.S.W., Colorado State University, 2019
Assistant to the Dean, Division of Business, Public Service & Social Sciences
- PONCE, Fernando, A.A.A.S., El Centro College, 1991
Vocational Credentials
Faculty of Carpentry and Construction, Division of Communications, Humanities & Technical Studies
- POSTLEWAIT, Larry
Pipe/Mechanical Trades I, Facilities & Operations
- PRITCHETT HILLIARD, Nichole, M.S., Capella University, 2008
Dean of Students
- PROVOST, David, M.M., American Public University System, 2016
Vocational Credentials
Faculty of Surgical Technician, Division of Medical Sciences
- QUINN, Laura, M.S.Ed., Queens College/City University of NY, 1997
Testing & Entrance Advising Specialist, Advising & Testing
- RADCLIFFE, Matthew, B.S.B., University of Colorado, 2017
Digital Strategist, Marketing & Communication
- RAGLAND, Jason
Police Officer I, Campus Police
- RAMALLO, Martha, M.S., Radford University, 1991
Faculty of Spanish, Division of Communications, Humanities & Technical Studies
- RAMEY, Kristi, B.S., North Georgia College, 1989
Faculty of Physical Education, Division of Natural and Physical Sciences
- READUS, Dale
Dining Services III, Child Development Center
- REED, Amy, B.S., Colorado State University, 1983
Vocational Credentials
Faculty of Dental Assisting, Division of Medical Sciences
- REYES, Michael
Military Admissions Specialist, Military & Veterans Programs
- RICHARDSON, Andrew
Equipment Mechanic II, Facilities & Operations
- RIDDLE, Ken, M.S., Colorado Technical University, 2000
Vocational Credentials
Professor of Computer Science, Division of Business, Public Service & Social Sciences
- RIFFEE, Carrie, B.A., Colorado College, 2008
Project Specialist, TRIO Student Support Services
- RINCON, Luisa, B.A., Queens College, 2009
Assistant Coordinator of Testing Center, Advising & Testing
- RIOS, Maricela
Custodian I, Facilities & Operations
- RISSE, Duane
Vice President for Administrative Services
- RITTER, Crystal, A.A., Pikes Peak Community College, 2007
Administrative Assistant III, Division of Natural and Physical Sciences
- RIZZI, Paula, M.B.A., Colorado Technical University, 2009
Financial Aid Advisor, Financial Aid
- ROBERTS, Benjamin, A.A.S., Pikes Peak Community College, 2018
Vocational Credentials
Faculty of Emergency Medical Services, Division of Medical Sciences
- ROBERTS, Calvin
Vocational Credentials
Faculty of Machining, Division of Communications, Humanities & Technical Studies
- ROBERTS, Gary
Materials Handler II, Bookstore
- ROBERTSON, Donald
Structural Trades II, Facilities & Operations
- ROBINSON, Constance, B.S., Regis University, 2004
Vocational Credentials
Program Assistant I, Instructional Support
- ROCHA, Kellie
Testing Support Specialist, Advising & Testing
- RODRIGUEZ, Christopher
Electrical Trades II, Facilities & Operations
- ROGERS, James
Custodian I, Facilities & Operations

- ROHLFING, Glenn, M.A., University of Colorado, 2005
Associate Professor of History, Division of Communications,
Humanities & Technical Studies
- ROLLINS, Susan, M.A.T., The Colorado College, 2011
Faculty of Mathematics, Division of Math & English
- ROMESBURG, Robert
Administrative Assistant II, Division of Math & English
- RANDOMANSKI, Melisa
Lead Teacher, Child Development Center
- ROOT, Sandra
Administrative Assistant III, Admissions, Recruitment &
Enrollment Services
- ROTH, Douglas, M.S., University of Texas, 1996
Associate Professor of Mathematics, Division of Math &
English
- ROTHLEUTNER, Marissa
Teacher, Child Development Center
- ROUTH, Lisa, Psy.D., California Coast University, 2006
Professor of Psychology, Division of Business, Public Service
& Social Sciences
- ROWAN, Kristin, Ph.D., Oklahoma State University, 1996
Faculty of Chemistry, Division of Natural and Physical
Sciences
- RUSS, Cheyenne
Custodian I, Facilities & Operations
- SALAS, Ronald
Police Officer I, Campus Police
- SANDEE, Ryan, M.S., University of Colorado, 2018
Assistant Professor of Mathematics, Division of Math &
English
- SANDERS, Kimberly
Financial Aid Advisor, Financial Aid
- SANDMORE, Chris, A.A., Pikes Peak Community College, 2008
Administrative Assistant II, Division of Communications,
Humanities & Technical Studies
- SANDOVAL, Virginia
Administrative Assistant III, Facilities & Operations
- SCHABERT, Jennifer, B.S., Tennessee Technological University,
2004
Financial Aid Advisor, Financial Aid
- SCHAFER, Clint, M.S., Colorado Technical University, 1996
Vocational Credentials
Faculty of Computer Information Systems, Division of
Business, Public Service & Social Sciences
- SCHANTZ WILCOX, Andrea, Ph.D., University of Colorado, 1993
Faculty of Biology, Division of Natural and Physical Sciences
- SHELL, Joseph
Custodian I, Facilities & Operations
- SCHILLING, Lachelle, Ph.D., Claremont Graduate University, 2014
Faculty of English, Division of Math & English
- SCHLARBAUM, Konrad, B.A., B.S., University of Northern Colorado,
2013
Sustainability Coordinator, Student Life
- SCHNACKEL, Ryan, B.A., Fort Lewis College, 2006
Bookstore General Manager, Bookstore
- SCHNEIDER, Christine, A.A.S., Pikes Peak Community College,
1994
Program Assistant I, Instructional Support
- SCHOFIELD, Robin, M.A., Arizona State University, 1994
Faculty Director, High Impact Practices
- SCHOOLCRAFT, Deidre, M.A., University of Northern Colorado,
1992
Professor of English, Division of Math & English
- SCOBEE, Roland
Operations Maintenance Manager, Facilities & Operations
- SCOTT, Andrew, M.A., Western Illinois University, 2008
Director of Learning Support Services, Learning Commons
- SELIGOVA, Ivana, M.S., Slovak Republic, 2004
Assistant Professor of Mathematics, Division of Math &
English
- SELLS, Norma Jean, B.S., Colorado State University, 1997
Default/Debt Management Advisor, Financial Aid
- SHARP, Amie, M.F.A., Seattle Pacific University, 2008
Assistant Professor of English, Division of Math & English
- SHAYER, Sarah, M.F.A., Texas Tech University, 2006
Faculty of Theatre, Division of Communications, Humanities
& Technical Studies
- SHAW, Daniel, Ph.D., Northwestern University, 1984
Faculty of Philosophy, Division of Communications,
Humanities & Technical Studies
- SHEARN, Jenna, M.A.T., The Colorado College, 2008
Vocational Credentials
Professor of Multimedia Graphic Design, Division of
Communications, Humanities & Technical Studies
- SHIPLEY, J. Renee, B.A., Oklahoma State University, 2009
Technician III, Military & Veterans Programs
- SIM, Lynn, M.S., Colorado Technical University, 1993
Vocational Credentials
Faculty of Electronics, Division of Communications,
Humanities & Technical Studies
- SKAGGS, Cindy, M.A., Regis University, 2015
Assistant Professor of English, Division of Math & English
- SMART, Lance
Structural Trades I, Facilities & Operations
- SMITH, Jeff
Electrical Trades II, Facilities & Operations
- SMYTHE, David, D.M., University of Phoenix, 2009
Vocational Credentials
Faculty of Business, Division of Business, Public Service &
Social Sciences
- SNYDER, Stephanie, B.A., Western State University, 2009
Assistant Registrar, Records
- SOLANO, Mario
Police Officer I, Campus Police
- SOLOMON, Mandy, M.A., Eastern Illinois University, 2003
Assistant Professor of English, Division of Math & English
- SOUTHCOTT, Joseph A., M.M.A.S., United States Army Command &
General Staff College, 1996
Dean, Math & English, Division of Math & English
- SPARKS, Shelly, B.S.N., University of Phoenix, 1996
Vocational Credentials
Faculty of Nursing, Division of Nursing

- SPENCER, Carrie, M.A., University of Colorado, 2001
Assistant Professor of History, Division of Communications,
Humanities & Technical Studies
- SPRAGUE, Myra, M.A., University of Colorado, 2002
Coordinator of the Child Development Center, Child
Development Center
- SPURGEON, Jennifer, B.I.S., Remington College, 2004
Staff Accountant, Financial Services
- STADEKER, Carl
Collections Specialist, Financial Services
- STADELBAUER, Jamie
Administrative Assistant III, Advising & Testing
- STALNAKER, Patrick, B.A., Art Institute of Colorado, 2008
Copy & Print Operations Manager, Publications & Printing
- STARKIE, Jessica, B.S., Colorado State University, 2011
Disability Specialist, Accessibility Services
- STEPHENSON, Eric, M.A., University of Colorado, 1996
Associate Professor of English, Division of Math & English
- STORY, Kenneth
Materials Handler III, Division of Communications,
Humanities & Technical Studies
- STRAND, Peter, B.A., University of Colorado, 1991
Vocational Credentials
Professor of Multimedia Graphic Design, Division of
Communications, Humanities & Technical Studies
- STRATTON, Pamela, A.A.S., Pueblo Community College, 1994
Administrative Assistant III, Instructional Support
- STREBEL, Chera
Accounting Technician IV, Financial Services
- STURDEVANT, Katherine, M.A., San Francisco State University,
1981
Professor of History, Division of Communications, Humanities
& Technical Studies
- SUE, Nadia, A.A.S., Pikes Peak Community College, 1990
Administrative Assistant II, Division of Math & English
- SULLIVAN, Mary, M.A., University of Phoenix, 2006
Vocational Credentials
Assistant Professor of Early Childhood Education, Division of
Business, Public Service & Social Sciences
- SUMMERSON, Karen, M.A., Bowling Green State University, 1986
Associate Professor of Mathematics, Division of Math &
English
- SUSTARSIC, March, M.A., Ohio University, 2001
Professor of Spanish, Division of Communications,
Humanities & Technical Studies
- SVETTE, Natalia
Teacher, Child Development Center
- SWANSON, Gina, M.A., University of Wyoming, 1998
Professor of Sociology, Division of Business, Public Service &
Social Sciences
- SWARTWOOD, Ronald, M.S., Regis University, 2007
Director of Financial Aid
- SWARTZ, Jennifer, Ph.D., University of Virginia, 2008
Faculty of Biology, Division of Natural and Physical Sciences
- TAGGART, Jacqueline, Ph.D., Union Institute & University, 2000
Vocational Credentials
Professor of Business, Division of Business, Public Service &
Social Sciences
- TAKKUNEN, Alison
COVID Case Manager, Student Services
- TAMBLYN, Jeffrey D., A.G.S., Pikes Peak Community College, 1995
Sales Manager I, Bookstore
- TAYLOR, Laurie
Administrative Assistant III, Division of Communications,
Humanities & Technical Studies
- TAYLOR, Ritika, M.S.N., Liberty University, 2014
Vocational Credentials
Faculty of Nursing Assistant, Division of Medical Sciences
- TEIXEIRA, Alberto, M.B.A., University of Colorado, 2016
Vocational Credentials
Director of Budget Services, Vice President of Administrative
Services
- TEKUBIE, Jodi
Technician IV, Admissions, Recruitment & Enrollment
Services
- THEARD, Cynthia, A.G.S., Pikes Peak Community College, 2005
Student Services Specialist II, Financial Aid
- THRELFALL, Albert L., M.S., University of Alabama, 1991
Professor of Biology, Division of Natural and Physical
Sciences
- TIMCO, Lance, M.F.A., University of Dallas, 1991
Faculty of Art, Division of Communications, Humanities &
Technical Studies
- TJADEN, Jessica
Administrative Assistant III, Division of Business, Public
Service & Social Sciences
- TOLLIVER, Gary
Pipe/Mechanical Trades II, Facilities & Operations
- TOMRDLE, Jacqueline, M.B.A., Regis University, 2013
Course Designer, Faculty Multimedia Consultant, eLearning
- TORRES, Lindsey, B.S., Austin Peay State University, 2016
Enrollment Services Specialist, Admissions, Recruitment &
Enrollment Services
- TREVINO, Katelyn
Lead Teacher, Child Development Center
- TRUJILLO, Antoinette, B.S.B., University of Phoenix, 2019
Vocational Credentials
Faculty of Surgical Technology, Division of Medical Sciences
- TRUJILLO, Esther
Administrative Assistant III, Records
- TRUJILLO, Kristina, M.B.A., Colorado Mesa University, 2018
Communications Specialist, Admissions, Recruitment &
Enrollment Services
- TRUJILLO, Tony, B.S.B.A., Colorado State University, 2008
Financial Aid Advisor, Financial Aid
- TUMANIS, Cassandra, B.S.N., Western Governors University, 2015
Vocational Credentials
Assistant Professor of Nursing, Division of Medical Sciences
- TUNSON, Sharon, M.A., University of Phoenix, 1998
Assistant Director of Career Start

- UHLHORN, Stephanie, M.S., Regis University, 2016
Vocational Credentials
Faculty of Nursing, Division of Medical Sciences
- ULRICH, Andrea, M.S., Texas Women's University, 2007
Vocational Credentials
Faculty of Health & Wellness, Division of Natural and Physical Sciences
- VALDEZ, Matthew
Online Education Librarian, Library
- VALLEE, Patrick, M.A., California State University, 2012
Faculty of English, Division of Math & English
- VELASQUEZ, Frances
Administrative Assistant III, Office of the President
- VICKERS, Mark, RN-BSN, Hondros College of Nursing, 2016
Vocational Credentials
Faculty of Nursing Assistant, Division of Medical Sciences
- VIGIL, Gary
Grounds & Nursery III, Facilities & Operations
- VOLLEBERG, Edward
Structural Trades III, Facilities & Operations
- WADMAN, Nathan, B.S., Colorado State University, 1996
Course Designer, LMS Administrator, eLearning
- WAIT, Pamella Jean, B.S.N., University of Colorado, 2004
Vocational Credentials
Faculty of Nursing Assistant, Division of Medical Sciences
- WALKER, James Gary, M.F.A., Spalding University, 2009
Assistant Professor of English, Division of Math & English
- WALKER, Jo
Facilities Resource & Finance Manager, Facilities & Operations
- WALLEN-SENA, Gwendolyn, M.A., University of Colorado, 2014
Assistant Professor of Anthropology, Division of Business, Public Service & Social Sciences
- WARD, Alexander, B.A., University of Colorado, 2019
Program Advisor, Advising & Testing
- WARD, Teresa, M.B.A., Colorado Technical University, 2011
Vocational Credentials
Director of Emergency Services Administration, Division of Business, Public Service & Social Sciences
- WEBBER, Sarah
Technician III, Admissions, Recruitment & Enrollment Services
- WELLS, M. Alex
Enrollment Services Specialist, Admissions, Recruitment & Enrollment Services
- WESLEY, Homer, Ed.D., University of Southern Mississippi, 1992
Vice President for Student Services
- WHEELER, Brian, B.S., Colorado State University, 2004
Vocational Credentials
Faculty of Multimedia Graphic Design & Radio & Television, Division of Communications, Humanities & Technical Studies
- WHEELER, Katie, M.A., University of Colorado, 2009
Professor of Communication, Division of Communications, Humanities & Technical Studies
- WHITE, Danielle
Administrative Assistant III, Division of Business, Public Service & Social Sciences
- WHITE, Leonard, M.S., Webster University, 2014
Veterans Academic Advisor, Military & Veterans Programs
- WHITE, Matthew
General Labor I, Facilities & Operations
- WHITEMAN, Sylvia, A.A.S., Pikes Peak Community College, 1993
Faculty Pay / Event Scheduling Coordinator, Instructional Support
- WHITTED, Sarah, B.A., The Art Institute of Colorado, 2003
Vocational Credentials
Faculty of Interior Design, Division of Communications, Humanities & Technical Studies
- WHITTEN, Kimberly, M.Ed., Colorado State University, 2015
Vocational Credentials
Faculty of Emergency Medical Services, Division of Medical Sciences
- WIDMAR, Robin, A.A.S., Pikes Peak Community College, 2011
Emergency Services & Clergy Compliance Coordinator, Campus Police
- WILLIAMS, Desiree, B.S., Colorado State University, 2015
Instructional Liaison, Advising & Testing
- WILLIAMS, Jenilee, M.B.A., Tarleton State University, 2014
Assistant Director of Concurrent Enrollment, High School Programs
- WILLIS, Debra
Program Assistant I, Student Life
- WILLIS, Robert, A.A.S., Denver Technical College, 2001
Client Services Manager, Information Technology Support Services
- WILSON, Abby, B.A., Metropolitan State University, 2013
Student Services Specialist II, Financial Aid
- WILSON, Sally Ann, M.Mus., The Juilliard School, 1981
Faculty of Music, Division of Communications, Humanities & Technical Studies
- WITT-AGNEW, Sheila
Program Assistant I, eLearning
- WU, Lisa
Enrollment Services Specialist, Admissions, Recruitment & Enrollment Services
- WULF, Gina, A.A., Pikes Peak Community College, 1999
Lead Teacher, Child Development Center
- WULF, Lincoln, M.S., Friends University, 2011
Director of Advising & Testing
- WYNN, Andrew
Structural Trades I, Facilities & Operations
- YEAKLEY, Jay, M.A.L.A., Midwestern State University, 2000
Professor of English, Division of Math & English
- YOUSEF, Rushdi, Ph.D., Martin Luther University, 2004
Faculty of Chemistry, Division of Natural and Physical Sciences
- ZIMBLEMAN, Dana, M.A., Auburn University, 1991
Professor of English, Division of Math & English
- ZINCONE, Joy, B.S., Wayland Baptist University, 1997
Career Pathways Coordinator, High School Programs
- ZUREK, Doug
Vocational Credentials
Police Officer II, Campus Police

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Christine Schneider

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Lorelle Davies

CAMPUS DIRECTORY

	Centennial Campus	Downtown Studio Campus	Rampart Range Campus
	Room • Phone:	Room • Phone:	Room • Phone:
Administrative Services, Vice President	A-324 • 502-2403		S-202 • 502-2100
Admissions	A-107 • 502-3000	S-100 • 502-3000	S-102 • 502-3000
Advising & Testing	A-121 • 502-3232	S-102 • 502-3232	S-101 • 502-3232
Art Gallery		S-109 • 502-4040	
Articulation, High School	A-220 • 502-3111		
Accessibility Services	A-130 • 502-3333	S-126 • 502-3333	S-202 • 502-3333
Aspen Market Cafe	A-211 • 502-4555		
Assessment	A-201a • 502-4045		
Bookstore	C-102 • 502-2665	S-104 • 502-2663	N-101 • 502-2664
Business, Public Service & Social Sciences Division	F-300 • 502-3300		W-209 • 502-3208
Campus Activities	A-210 • 502-2500	N-106 • 502-2091	S-207 • 502-2091
Campus Center Meeting Rooms	A-210 • 502-2089		
Campus Life Information Desk	A-210 • 502-2522	N-106 • 502-2538	S-207 • 502-2577
Campus Life Main Line	A-210 • 502-2500		
Campus Police Administration	A-100 • 502-2900	S-101 • 502-2900	N-106 • 502-2900
Campus Police Emergency Line	A-100 • 502-2911	S-101 • 502-2911	N-106 • 502-2911
Career and Retention Services	A-316 • 502-2360	S126 • 502-2360	S-207 • 502-2360
Career Start	A-220 • 502-3111		
Cashier	A-101 • 502-2086	S-100 • 502-2086	S-102 • 502-2086
Child Development Centers	CDC • 502-2323		CDC • 502-2424
Communications, Humanities & Technical Studies Division	F-300 • 502-3200	S-210 • 502-3200	W-119 • 502-3200
Computer Access Center (Accessibility Services)	A-130 • 502-3030	S-126	
Computer Labs	A-300 • 502-2442	S-207 • 502-2443	E-203 • 502-2408
Copy Center	C-101 • 502-2111		
Credit for Prior Learning	A-106 • 502-2302		
Dean of Students	A-106 • 502-2367		
eLearning	A-229 • 502-3555		
E-news Newsletter@ppcc.edu	A-324 • 502-2022		

English as a Second Language	F-200 • 502-3535		
Facilities & Operations	B-229 • 502-2800	N-103 • 502-2800	N-111 • 502-2800
Financial Aid	A-110 • 502-3000	S-100 • 502-3000	S-102 • 502-3000
Financial Services	A-101 • 502-2300		
First Aid/Medical Assistance	A-100 • 502-2911	S-101 • 502-2911	N-104 • 502-2911
Fitness Center/Gymnasium	A-262 • 502-2555		
Food Services	A-211 • 502-2038		W-103 • 502-2042
Foundation	A-324 • 502-2013		
High School Articulation	A-220 • 502-3111		
Human Resource Services	B-200 • 502-2600		
Information Technology Support Services (ITSS)	B-201 • 502-4800	N-105 • 502-4800	E-206 • 502-4800
Computer Labs	A-300 • 502-2442	N-106 • 502-2443	E-203 • 502-2408
Service Desk	A-111 • 502-4800	502-4800	502-4800
Instructional Services, Vice President	A-324 • 502-3100		
Interpreting Services (Sign Language)	A-115 • 502-3026		
KEPC Radio	A-153 • 502-3166		
Learn to Earn	A-233 • 502-2404		
Learning Commons -Tutoring	A-212 • 502-3444	S-126 • 502-3444	S-201 • 502-3444
Library	A-201 • 502-2400		N-201 • 502-2440
Marketing & Communication	A-324 • 502-2082		
Math & English Division	F-200 • 502-3600		W-119 • 502-3171
Medical Sciences Division	CHES 200 • 502-3700		
Military & Veterans Programs	C-222 • 502-4100 502-4200 / 502-4300		
Natural and Physical Sciences Division	F300 • 502-3400		W-209 • 502-3400
Ombuds	A-324 • 502-2012		
Pikes Peak Regional Law Enforcement Academy	F-300 • 502-3132		
Post-Secondary Enrollment Options (PSEO)/Concurrent Enrollment	A-220 • 502-3111		
PPCC-tv (WLX-245)	A-209 • 502-3458		
President's Office	A-324 • 502-2200		S-202 • 502-2200
Procurement	B-229 • 502-2007		
Publications & Printing	C-101 • 502-2111		
Reading Center	A-311 • 502-3510		
Records	A-106 • 502-3000	S-100 • 502-3000	S-102 • 502-3000
Recreation & Sports	A-262 • 502-2555		

Recruitment	A-106 • 502-2018	S-122b • 502-2088	S-102 • 502-2667
Scholarships	A-365 • 502-2016		
SkillsUSA	A-220 • 502-3111		
Southern Colorado Educational Opportunity Center (SCEOC)	A-110 • 502-3028		
The Counseling Center	A-141 • 502-4782	S-126 • 502-4689	S-207b • 502-4689
Student Government	A-204 • 502-2104	N-106 • 502-2103	S-207 • 502-2098
Student Services, Vice President	A-324 • 502-3563		
Student Services	A-107 • 502-3000	S-100 • 502-3000	S-102 • 502-3000
Student Success, Vice President	A-324 • 502-2541		
Transfer from PPCC		S-218 • 502-3237 S-122 • 502-3002	
TRIO Disability Student Support Services	A-130 • 502-3222		
TRIO Student Support Services	A-130 • 502-3222		
Veteran's Upward Bound	C-222 • 502-4545		
Women's Forum	A-201 • 502-4044		
Workforce Development	A-223 • 502-2404		

INDEX

A

AAS Requirements	96
About this Catalog.....	3
Academic Calendar.....	8
Academic Concerns	22
Academic Honesty.....	34
Academic Progress Standing.....	21
Academic Renewal.....	21
Academic Standards.....	17
Accessibility Services	41
Accounting.....	98
Accounting Courses	174
Active Duty and Family Members/Guard and Reserve	49
Activities	46
Activities and Events.....	48
Administrative Services Staff	285
Advancing Academic Achievement	52
Advancing Academic Achievement Courses.....	175
Advising and Testing.....	11, 42
Agriculture Crops & Soils Course.....	175
AIDS Policy.....	37
Alcohol and Drug Policies	35
All About PPCC.....	5
Allied Health	99
American Opportunity Tax Credit.....	16
American Sign Language Courses	175
Anthropology.....	61
Anthropology Courses	176
Application for Certificate or Degree	23
Approved Elective Course List for AA Degrees and Course of Study	56
Approved Elective Course List for AS Degrees	85
Arabic Courses	177
Architectural Engineer / Construction Management	99
Architectural Engineer/Construction Management Courses.....	177
Art - Art History	62
Art - Studio Art	62
Art Courses	178
Articulation Agreements	54
Assessment of Student Learning	23
Associate of Applied Science Degrees (AAS) and Certificates.....	96
Associate of Applied Sciences Degree Programs and Certificates	98
Associate of Arts Degrees (AA)	55
Associate of Arts Degrees and Courses of Study	61
Associate of General Studies Degree (AGS)	93
Associate of Science Courses of Study.....	84
Associate of Science Degree (AS)	85
Astronomy Courses.....	182
Auto Motorsports Technology Courses	183
Automotive Collision Technology.....	101
Automotive Collision Technology Courses	184
Automotive Service Technology Courses.....	186
Automotive Technology.....	104

B

Bachelor of Applied Science Course of Study.....	171
Bachelor of Science in Nursing Course of Study	171
Behavioral Intervention Team (BIT).....	38
Biology	85
Biology Courses.....	188
Books.....	15
Building and Construction Technology.....	107

Business	63
Business & Technology Education Courses.....	190
Business Administration	111
Business Courses	189

C

Campus Center.....	46
Campus Crime and Security Report	40
Campus Directory	302
Campus Map.....	2
Career Advancement, Customized Training and Workforce Development	48
Career and Retention Services	42
Career and Technical Education Programs.....	6
Career Start	54
Carpentry Courses.....	190
CCOnline (Sections C11, C21).....	53
Certificate Requirements	96
Change of Major/Program	17
Chemistry.....	86
Chemistry Courses.....	191
Child Development Centers	42
Chinese Courses.....	191
Civil Rights and Sexual Misconduct Resolution Process.....	31
Class Schedule	11
Classroom Attendance Procedure	34
College Administrative Staff.....	285
College Composition & Reading Course.....	192
College Opportunity Fund (COF).....	14
College Preparatory Programs	52
Colorado ASSET Bill	14
Colorado Community College System.....	301
Come See Us	7
Communication	64
Communication Courses.....	192
Computer & Networking Technology Courses.....	194
Computer Aided Drafting and Design - Mechanical.....	114
Computer Aided Drafting Courses	193
Computer Information Systems.....	117
Computer Information Systems Courses	195
Computer Labs	43
Computer Networking Technology.....	119
Computer Science	87
Computer Science Courses.....	196
Computer Web-Based Courses.....	198
Concurrent Enrollment	11, 54
Conduct in College Buildings	34
Construction Technology Courses	198
Copy Center	37
Counseling Courses.....	200
Course Descriptions	174
Course Numbering System	174
Credit by Examination	17
Credits in Residence	23
Criminal Justice	65, 121
Criminal Justice Courses.....	201
Culinary Arts.....	123
Culinary Arts Courses	203
Cyber Security.....	126

D

Dance.....	66
Dance Courses	205
Days of Enforcement.....	38

Degree & Program Requirements.....	55
Degree and Certificate Criteria	51
Degree Eligibility	51
Dental Assisting.....	127
Dental Assisting Courses.....	207
Department of Campus Police.....	43
Developmental Courses	174
Diesel Power Mechanics Courses.....	209
Diesel Technology.....	128
Dietary Management.....	130
Dietetic Technology Courses.....	211
Diversity, Equity, and Inclusion Staff	286
Driving Courses.....	212

E

Early Childhood Education	130
Early Childhood Education Courses.....	212
Early Childhood Education Teacher Preparation	66
Earned Income Tax Credit/Child Tax Credit	16
Economics.....	67
Economics Courses	214
Education Courses.....	214
Educational Programs	51
Electricity Industrial Commercial Courses.....	215
Electronics Courses.....	216
Elementary Education [Teacher] Preparation	68
Emergencies and Crime Reporting	38
Emergency Management & Planning	93
Emergency Management & Planning Courses.....	217
Emergency Medical Services	132
Emergency Medical Services Courses.....	218
Emergency Notification	39
Emergency Service Administration	171
Emergency Service Administration Courses.....	221
Employment Opportunities.....	16
Engineering Courses.....	222
Engineering Graphics Technology Courses	223
English (Literature Emphasis).....	68
English as a Second Language Courses.....	224
English as a Second Language Preparatory Program.....	52
English Courses	223
English Preparatory Program	52
Entrepreneurship Course	225
Environmental Science Courses	225
Environmental Studies	69
Ethnic Studies Courses	225
Evening College	53

F

Faculty & Staff	287
Faculty and Instructor Resource Guide	5
Finance Courses	225
Financial Aid.....	15
Fire Science Technology.....	134
Fire Science Technology Courses	226
Fire Science Wildland.....	136
Fire Science Wildland Courses.....	227
Firearms on Campus	37
Foundation Scholarships.....	16
Foundation Staff.....	286
French	70
French Courses.....	228

G

General Education Electives for AAS Degrees & Certificates .	96
Geography.....	71
Geography Courses	228
Geology.....	87
Geology Courses	228
German Courses.....	229

Getting Started.....	11
Grade Changes.....	21
Grading Options	20
Grading System	18
Graduation Ceremony.....	23
Graduation Honors.....	23
Grants.....	16

H

Health and Wellness Courses	229
Health Professional Courses	230
Heating, Air Conditioning and Refrigeration Technology.....	136
Heating, Air Conditioning and Refrigeration Technology Courses	231
High School Student Records.....	54
History.....	72
History Courses	232
History of the College.....	5
Holistic Health Professional Course.....	234
Hospitality.....	94
Hospitality Courses	235
How to Calculate Your GPA.....	21
Human Resources Staff.....	286
Humanities	73
Humanities Courses.....	235
Hyflex Classes	53

I

ID Cards	46
Independent Study.....	174
Independent Study Courses	53
Information Technology Support Services	43
Instructional Services Staff	285
Interior Design.....	138
Interior Design Courses	236
International (F1) Students	12
International Transcript Evaluations.....	17
Interpreter Prep Program Courses	238
Italian Courses	239

J

Japanese Courses.....	239
Journalism	74
Journalism Courses.....	239

K

KEPC Radio - 89.7 FM	48
----------------------------	----

L

Law Enforcement Courses.....	240
Learning Commons - Tutoring	43
Library.....	48
Literature Courses	241
Live Remote Classes.....	53
Loans	16
Locations and Facilities	6

M

Machining Courses	242
Machining Technology	138
Management Courses.....	243
Manufacturing Technology Courses.....	244
Marketing & Communications Staff.....	286
Marketing Courses.....	244
Math Courses	244
Mathematics	88
Mathematics Preparatory Program	52
Maximum Course Load.....	17
Medical Assistant.....	142
Medical Assistant Professional Courses	246

Medical Office Technology.....	143
Medical Office Technology Courses	247
Meteorology Course	247
Military,Veterans, Family Members.....	49
Mission Statement.....	5
Multimedia Graphic Design	145
Multimedia Graphic Design Courses.....	248
Music	75
Music Courses.....	251

N

Natural Resources Courses.....	253
New Students	11
Non-Voting Board Members	301
Nursing	148
Nursing Assistant Courses.....	255
Nursing Courses.....	254

O

Occupational Safety Technician Courses.....	256
Off Campus Courses	174
Office of Sustainability.....	46
Officers of the College.....	285
Ombuds	44
Online Learning/eLearning Options.....	52
Options for Current High School Students.....	54
Other Programs and Courses of Study.....	173
Outdoor Leadership & Recreation Technology.....	150
Outdoor Studies Courses.....	256

P

Paralegal Courses	260
Paralegal/Legal Assistant.....	152
Para-Professional Education	173
Park Ranger Course	260
Parking and Traffic Regulations	37
Pharmacy Technician.....	153
Pharmacy Technician Courses	261
Philosophy	76
Philosophy Courses.....	261
Phlebotomy.....	154
Photography Courses.....	262
Physical Education Courses	264
Physical Therapy Assistant	155
Physical Therapy Assistant Courses.....	266
Physics.....	89
Physics Courses	267
Pikes Peak Community College	1
Pikes Peak Community College Advisory Council.....	301
Pikes Peak Community College Catalog Team	301
Pikes Peak Regional Law Enforcement Academy	156
Planning for a Bachelor's Degree/Transfer Programs	6
Plumbing Courses	267
Political Science	76
Political Science Courses.....	268
PPCC All Student Handbook	6
PPCC Hybrid Classes (Sections 1H1, 2H1, 3H1, etc.).....	52
PPCC Online Campus (Sections 1N1, 2N1, 3N1, etc.).....	53
PPCC-tv	48
Pre-Allied Health.....	90
Pre-Engineering.....	173
Pre-Med Professions.....	90
President's Staff.....	285
Prior Learning Assessment (PLA)	53
Professional Photography.....	156
Professional Writing & Communication	77
Programs	16
Psychology	78, 91
Psychology Courses	268
Public Security Management Courses	269

R

Radio & Television	158
Radio & Television Courses	270
Radiologic Technology Courses	271
Radiology - University of Colorado Health / Memorial Health System School of Radiologic Technology / PPCC Collaborative Program	160
Readmit Students.....	11
Records	44
Recreation and Wellness	46
Recreation Courses	272
Refunds/Adjustments	15
Registered Nurse.....	171
Registration.....	12
Repeated Courses.....	21
Report of Criminal Offenses.....	40
Reporting Criminal Offenses.....	40
Required Disclosures	5
Research Activities	24
Residency Classification Appeals	15
Respiratory Care Courses	272
Restricted Attendance.....	35
Rioting Offenses	40
Robotics & Automation Systems Technology.....	160
Russian Courses.....	273

S

Satisfying College Course Placement Requirements.....	12
Science Courses	273
Secondary Education Teacher Preparation.....	173
Selected Topics	174
Service Learning Program.....	53
Services for Students	41
Services for the Community.....	48
Sex Offender Registration	40
Sexual Harassment	36
Sign Language Interpreter Preparation.....	163
Smoking on College Grounds.....	36
Social Services Technician.....	164
Social Work Courses.....	273
Social Work Transfer	79
Sociology.....	80
Sociology Courses	274
Southern Colorado Educational Opportunity Center (SCEOC)	44
Spanish	81
Spanish Courses.....	274
State Board for Community Colleges & Occupational Education	301
State-Guaranteed Curriculum	174
Student Activity Fees.....	15
Student Clubs and Organizations	47
Student Code of Conduct.....	25
Student Conduct.....	25
Student Disciplinary Procedure	26
Student Government.....	47
Student Grievance Procedure.....	29
Student Life	46
Student Services Staff.....	286
Surgical Technology.....	165
Surgical Technology Courses	275

T

Term Academic Honors	23
The Counseling Center	44
The Downtown Studio Gallery	48
Theatre.....	82
Theatre Courses	276
Transcript Requests	18
Transfer Students to PPCC.....	11

Transfer to PPCC.....	17
Translation & Tourism Courses.....	278
TRIO-Disability Student Support Services.....	45
TRIO-Student Support Services.....	45
Tuition	14
Tuition and Fees	14
Tuition and Fees (2020-2021)*	15

U

Use of College Facilities	7
---------------------------------	---

V

Values.....	5
Veterans /GI Bill® Benefit Users	50
Veterans Upward Bound	50
Veterinary Assistant.....	165
Veterinary Technology Courses.....	278
Vision Statement	5
Visitation Program (Four-year Colleges & Universities)	45

W

Water Environmental Technology	166
Water Quality Management Courses	280
Weekend College	53
Welding	167
Welding Courses	281
Western Undergraduate Exchange (WUE) Program.....	14
Women and Gender Studies Courses.....	282
Work Experience Courses	174
World Languages	82

Z

Zoo Keeping Courses	282
Zoo Keeping Technology	169



PIKES PEAK
COMMUNITY
COLLEGE

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